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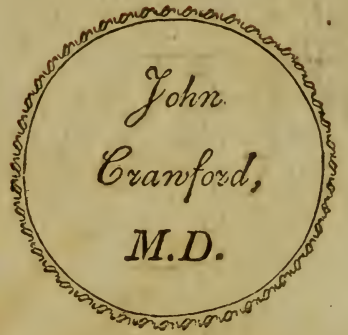

MEDICAL FACTS

AND

OBSERVATIONS.

VOL. I.

MEDICAL FACTS

AND

OBSERVATIONS.

VOLUME THE FIRST.

LONDON:

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PREFACE.

THE preſent Collection of Facts and Obſervations is intended as a ſequel to the London Medical Journal. The indulgent manner in which that work was received by the Public, and the numerous and valuable Communications with which the Editor was favoured by his Correſpondents, induced him to perſevere in bringing it out, at ſtated quarterly periods, much longer than well ſuited his other avocations. But that mode of publication having at length been attended with great inconvenience, both to his profeſſional engagements and to

the deliberate management of the work, he became desirous of conducting his future labours in a way more convenient and satisfactory to himself.

He was aware, that, by making such an alteration in the plan of the Journal as might enable him to continue it at his leisure, he should retain the advantages which an established work might be expected to have over a new undertaking; but the respect he owed to his readers (many of whom might, perhaps, have considered any farther change in the mode of publication as too great a deviation from his original plan) induced him rather to bring the London Medical Journal to a conclusion, and to begin a new Collection, the arrangement of which, so far as should relate to the periods of publication, might be better adapted to his other avocations.

The London Medical Journal accordingly ended with the eleventh volume; and the preſent Collection of MEDICAL FACTS AND OBSERVATIONS is offered to the Public in its ſtead. The object of this new work, like that of the Journal, will be to contribute to the improvement and diffuſion of medical knowledge; and, like that, it will conſiſt of papers communicated by Correſpondents, and of materials collected from the Tranſactions of learned Societies and other printed works.

This method of blending original obſervations with materials collected from books ſeems to be the moſt proper for a work of this kind, which, while it ſerves to excite a ſpirit of inquiry, and records intereſting facts, is intended to compriſe accounts of every important diſcovery and improvement that ſhall be made in medical ſcience.

The

The great Lord Bacon, who complained, with too much reaſon, of the few additions made to their art by the medical writers of his time *, recommended Collections of Facts and Obſervations as the beſt means of improving the practice of phyſic †; and it is to the method of inveſtigating philoſophical truth, by induction from accurate experiments, which he ſo admirably inculcated, that we are, in a great meaſure, indebted for that attention to facts by which medical ſcience, in common with every other branch of natural knowledge, hath, ſince the days of that truly illuſtrious philoſopher, been ſo much improved.

There is, perhaps, hardly any well-informed perſon, engaged in the practice of phyſic or ſurgery, to whom opportunities do not now and then occur of adding ſome-

* De dignitate et augm. Scient. lib. iv. cap. 2.
† Ibid.

thing

thing to our knowledge of diſeaſes; or whoſe mind, from attentive obſervation, may not lead him to ſuggeſt ſome improvement in the modes of treating them: and when it is conſidered that many ingenious men may be willing to communicate the reſult of their experience, in a conciſe and familiar form, who have not leiſure or inclination to compoſe a more elaborate work; the utility of a Collection, like the preſent, which is open to detached facts and obſervations, on any medical ſubject, will, it is preſumed, be ſufficiently obvious.

The Editor flatters himſelf alſo, that by continuing, as in the Journal, to collect a part of his materials from books he ſhall render an acceptable ſervice to the reader. The channels of medical information are now ſo numerous, and in ſo many different languages, that many important obſervations

vations probably remain for a long time unknown to perſons who are buſily employed in the practice of phyſic, and to whom, of courſe, they would be the moſt intereſting, but who have not ſufficient time or opportunity to conſult the ſeveral works in which they are to be found.

This remark ſeems to be more particularly applicable to the Tranſactions of learned Societies, which, on account of their bulk and price, or the variety of ſubjects, not immediately connected with phyſic, of which they treat, are, comparatively ſpeaking, in the hands of few medical readers, although they frequently contain papers with which this claſs of readers cannot but wiſh to be acquainted. To collect from ſuch publications, either entire or in an abridged form, the more important obſervations, relative to the practice of phyſic and

to

to medical philoſophy, which they contain, ſeems likely, therefore, to be of conſiderable utility; and for the reaſons, juſt now given, the Editor intends alſo to have recourſe, occaſionally, to other printed works, but without profeſſing to give a general review of new medical books. Of theſe, however, a catalogue will be inſerted at the end of each volume.

The Editor propoſes to bring out a part of this Collection as often as he ſhall have got together materials ſufficient to fill about fifteen ſheets in octavo; a volume of this ſize, as it will enable him to make the periods of publication more frequent, ſeeming to be better calculated for the purpoſes of the work than one of greater bulk.

Communications for this work may be addreſſed to Dr. Simmons, Poland Street, London.

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MEDICAL FACTS

AND

OBSERVATIONS.

I. *Case of Hydrophobia; with the Appearances on Diſſection. Communicated in a Letter to* Samuel Foart Simmons, *M. D. F. R. S. by* John Ferriar, *M. D. Phyſician to the Infirmary at Mancheſter.*

ON Friday morning, December 3, 1790, I was deſired to viſit John Johnſon, recommended as a home patient of the Infirmary, who was ſaid to have been bitten by a mad dog.

I found him in a tremulous, irritable ſtate, with a weak, irregular pulſe, and a white tongue. His eyes looked wildly; he was fearful of every unexpected noiſe, and ſeemed to be continually on the watch againſt ſurpriſes. When interrogated reſpecting his complaints,

he gave a long detail of pains in his cheſt, cough, and difficulty of breathing; but was unwilling to mention his dread of water. He owned that, a conſiderable time before, he had been bitten in the left cheek by a ſtrange dog, which leaped at his face in paſſing while he was at work in the ſtreet. The accident affected him ſo little, that the preciſe date of it had eſcaped his memory. He gueſſed it to have happened more than three months ago. Since that time he had been twice afflicted with complaints ſuppoſed to be pleuritic, which were removed by bleeding, bliſtering, and other remedies, of which he could give no account. He had been bled twice within the laſt week, and had a bliſter on the left ſide of the cheſt when I ſaw him.

On Monday, November the 29th, in the evening, his wife had obſerved, for the firſt time, that he ſwallowed ſome gin and water with reluctance and difficulty; the uneaſineſs in ſwallowing liquids ſoon became his principal complaint, but the bite was not recollected till Thurſday evening; when a medical gentleman, who was applied to, inquired whether he had ever been bitten by a dog. Even then he recollected the circumſtances but imperfectly. He

got

got down ſolids with great eaſe during the whole complaint.

When I deſired him to drink a little water, he ſhewed ſtrong marks of diſguſt, but, recollecting himſelf, ſaid he would try; that he did not believe the dog to have been mad, (an idea in which I encouraged him), and that he was not afraid of water. As ſoon as he touched the cup, I perceived ſome ſpaſmodic contractions of the muſcles of deglutition, and when he raiſed it towards his mouth the muſcles of the cheeks were ſtrongly contracted, and a ſort of convulſive gulping was very frequently repeated. After one or two unſucceſsful attempts, he ſwallowed a ſmall quantity of water, but with a violent ſtruggle, ſucceeded by univerſal tenſion; and he would not be perſuaded to make another trial.

He complained that cold air affected his throat with a ſimilar uneaſineſs; and when aſked where the impreſſion was felt, pointed to his throat, immediately under the thyroid cartilage. The opening of the door always made him complain.

His diſcourſe was ſomewhat incoherent, and he frequently referred, with ſome degree of terror, to the circumſtance of the bite.

By his wife's account, he had been a ſober, induſtrious man; abſtemious with reſpect to food; and addicted to no practices likely to pervert his imagination. His age was thirty-nine; his evacuations were in a natural ſtate.

The ſcar on his cheek, which was between the ear and the angle of the jaw, but rather more advanced, was hardly diſcernible: his wife remembered to have ſeen it bloody. I had him removed to the Hoſpital as ſoon as poſſible, that he might enjoy every advantage of attendance; and till I could have the ſatiſfaction of conſulting with my brethren, ordered him to take a bolus, containing a ſcruple of bark, ſix grains of muſk, and half a grain of opium: he was immerſed in the cold bath, and was directed to ſwallow, as often as poſſible, a portion of a mixture of vinegar and water.

After his removal, as his wife had informed me that the ſound of water diſtreſſed him, I directed ſome to be poured out in the paſſage adjoining to his room. He ſtarted at the noiſe, looked wildly round, begged to be ſent home, and ſaid he was not afraid of water.

At five o'clock in the afternoon we met in conſultation, when the horror of water, and difficulty

ficulty of ſwallowing it, were aſcertained in preſence of all the phyſicians to the houſe.

We agreed to ſcarify the cicatrix on the cheek deeply, and to apply a bliſter over the inciſions: a bolus, containing a ſcruple of bark, fifteen grains of muſk, and two grains of opium, was directed to be given every four hours; two drachms of ſtrong mercurial ointment were applied to the throat, arms, and groins; a mixture of eight ounces of diſtilled vinegar, and twelve ounces of decoction of bark, was ordered, of which three or four table-ſpoonfuls were to be given as frequently as poſſible; and a poultice, conſiſting of three drachms of galbanum, two ſcruples of opium, and one drachm of camphor, was applied, after the mercurial friction, to the throat.

About nine o'clock the ſame evening I ſaw him again. He had ſwallowed his medicines without much reluctance, but was more incoherent, and complained greatly of cold.

During the night his delirium increaſed: he was very reſtleſs, impatient, and intractable. He threw himſelf out of bed repeatedly, and with his nails ſcratched the hand of one of the keepers who attempted to replace him. However, he took four boluſes, and ſwallowed more

than a pint of his mixture. He had one ſtool before morning.

At nine o'clock on Saturday morning, December 4th, we met again in conſultation. We found that his difficulty in ſwallowing liquids was leſs: he had taken ſome very thin porridge, the uſual breakfaſt of the houſe; and he drank ſeveral draughts of his mixture, without any ſtriking appearance of diſguſt, in our preſence; but his eyes were heavy, and inclined to fix, his pulſe much ſunk, and there was a conſtant tendency to low delirium. We, therefore, concluded that the termination of the diſeaſe approached; but directed that the plan we had agreed on ſhould be purſued as long as he ſhould be capable of ſwallowing. Before I left him he retched ſeveral times, and brought off ſome wind: half a grain of emetic tartar was directed to be added to his next bolus, but he did not live to take it. At a quarter paſt ten he ſwallowed ſome of his mixture, and immediately after threw up a part of it again. He then fell into convulſions, and died in the courſe of a few minutes.

I was very deſirous of examining the body as early as poſſible, that the appearances attending this dreadful diſorder might be fairly aſcertained;

tained ; the inflammation of the ſtomach, deſcribed in former diſſections, having been often attributed to the action of the gaſtric juice. Accordingly, the body was opened by Mr. Simmons, at a quarter before three o'clock on Saturday afternoon, in preſence of moſt of the phyſicians and ſurgeons of the hoſpital.

In the brain, which was the part firſt examined, the only preternatural appearance was a diſtention of the pia mater, on both hemiſpheres, with a limpid fluid. The quantity of water in the lateral ventricles, at the baſis of the brain and round the ſpinal marrow, appeared to be ſomewhat unuſual. The lungs were uncommonly ſound, excepting one ſlight adheſion at the poſterior part of the left lobe. The trachea was perfectly ſound. The pericardium adhered pretty firmly to the heart in its whole compaſs. The ſtomach and inteſtines ſeemed, externally, ſound; but on opening the œſophagus a morbid appearance preſented itſelf. About two inches above the cardia the epidermis of the œſophagus was abraded in irregular points, and expoſed an inflamed ſurface of a dark red colour : ſtill lower, the abraſions became linear, and extended into the ſtomach itſelf. The edges of the epidermis, ſurrounding the abraſions, were unequal,

and elevated. A ſimilar affection was traced along the leſſer curvature of the ſtomach, but fainter in its progreſs to the pylorus, where it was leaſt diſcernible, and about which it ſeemed to terminate. The whole of the inflamed parts bore a ſtriated appearance, darkeſt in the œſophagus, and lighteſt and more indiſtinct towards the pylorus. The ſtomach was half full of a dark-coloured fluid, which ſmelt ſtrongly of muſk. The other viſcera were in a natural ſtate.

As no more than four hours and a half elapſed between the patient's death and the diſſection, I believe the abraſion obſerved may be fairly conſidered as the effect of the diſeaſe, eſpecially as the ſtomach contained a conſiderable quantity of fluid; but although the preternatural irritability, produced by this ſpecific inflammation, completely explains the peculiar ſenſibility to cold water and cold air, yet the dread of water, though conſtituting the diagnoſis, can only be regarded as *the ſymptom of a ſymptom.* The local inflammation, even when conſidered in connexion with the ſlight effuſion viſible in the brain, is very inadequate to the explanation of the patient's death.

The

The relief from the difficulty of ſwallowing liquids, obſervable towards the cloſe of this caſe, is not a ſolitary inſtance; the diſeaſe has even been ſaid to exiſt without any horror of water, or difficulty of receiving it into the ſtomach *.

The eaſe with which ſolids were ſwallowed by our patient admits an obvious explanation. In the irritable ſtate of the œſophagus, the comparatively ſmall degree of contraction neceſſary for the deſcent of ſolid food, is performed without difficulty. For the deglutition of liquids a very ſtrict contraction is required, which ſtrains and irritates the inflamed parts, and conſequently occaſions great diſtreſs.

Little information reſpecting the practice in hydrophobia can be drawn from this caſe; yet if other obſervations ſhould confirm the opinion, that a peculiar inflammation exiſts in the ſtomach and œſophagus, in all inſtances of this diſeaſe, I conceive that ſome meaſures ſhould be taken to counteract it, though it appears to be only a ſymptom of the general diſorder. Bliſters applied to the throat, or between the

* See Mead's works; Lieutaud, Precis de la Med prat., and ſome late articles in the newſpapers.

ſhoulders,

ſhoulders, might be uſeful; and if another ſimilar caſe ſhould unhappily occur to me, I ſhould certainly employ them. Our patient had a recent bliſter on his ſide.

Lieutaud* enumerates very extenſive appearances of inflammation and ſuppuration in the ſtomach and bowels of hydrophobic patients diſcovered on diſſection, and other writers have mentioned inflammation of the ſtomach, in ſuch caſes, in general terms; but perhaps ours is the moſt ſatisfactory examination yet obtained, on account of its nearneſs to the death of the patient. Lieutaud mentions the adheſion of the pericardium to the heart, among other appearances.

I ſhould conceive blood-letting to be a very ambiguous remedy in this complaint: with us it was prohibited by the ſtate of the pulſe, the advanced period of the diſeaſe, and the free uſe made of it a few days before by the patient.

The large uſe of mercurial frictions is ſaid to have been ſucceſsful in hydrophobia. It has perhaps been ſuggeſted by the determination to the ſalivary glands, ſo remarkable in the courſe of the diſeaſe. I own I have ſome

* Precis de la Medecine pratique, Tome II. p. 92. 8vo. Paris, 1777.

doubts

doubts reſpecting the propriety of uſing a remedy which produces ſo great a degree of irritability in the ſtate of high irritation attending hydrophobia. The appearance of the inflamed parts approaches to the eryſipelatous ſtate; and the whole train of ſymptoms ſeems to require the aid of the cold bath, and the free uſe of bark and opium.

Mancheſter,
December 12, 1790.

II. *Some Obſervations on the Prevention and Treatment of Hydrophobia. Communicated in a Letter to Dr.* Simmons *by Mr.* William Loftie, *Surgeon at Canterbury.*

ABOUT two years ſince a poor man applied to me who had been bitten, both on the leg and arm, the day before, by a dog that died mad, after having bit two other dogs which were immediately killed.

The wounds were ſmall; that on the arm was about two inches above the wriſt, and only one of the dog's teeth had penetrated: the other, on the tibia, was more conſiderable; here were the marks of two teeth.

In

In this caſe nothing was done till the time of his application to me, (twenty hours after the accident) when I diſſected out the bitten parts, taking off a piece of the integuments, of about the ſize of half a crown, and removing every part that had been even touched by the teeth.

Lint, dipped in a ſtrong ſolution of corroſive ſublimate, was applied to the parts, which were moiſtened at times with the ſame.

The next day, the arm and leg being much inflamed, an emollient cataplaſm was applied over the dreſſings, and the patient was directed to take ſome Glauber's ſalt.

On the third day the dreſſings were removed, a large eſchar was then formed, and there was a conſiderable diſcharge from the wound.

From this time the ſlough came off daily, and the wound diſcharged a laudable pus.

On the eighth day the patient complained that his mouth and gums were ſwelled; which muſt have been owing to abſorption of the corroſive ſublimate, as no mercurials were given internally.

The purging ſalt was occaſionally repeated, and the wounds were kept open for ſeven or eight weeks, when they were ſuffered to heal; and the patient has continued well ever ſince.

From

From every circumſtance I have no doubt that the dog by which this perſon was bit was mad; and I cannot help thinking that the patient's eſcape was entirely owing to the removal of the parts bitten, and keeping the wounds open ſo long.

Since that time another caſe of the ſame kind has fallen under my care, which I treated in a ſimilar manner and with equal ſucceſs; but in this the certainty of the animal being mad was not ſo clear.

Two caſes are related by Mr. Foot * of exciſion being attended with ſucceſs, in one of which the diſtance of time, between the bite of the dog and the extirpation of the part, was from thirty-two to thirty-five hours; and in the other, ſixty-eight hours. Such inſtances as theſe, and the firſt of thoſe which I have related from my own experience, evidently prove the uſefulneſs and neceſſity of extirpation; and indeed I have long been of opinion, from all I have heard and read on the ſubject, that nothing leſs than the complete exciſion of the parts bitten can be relied on, with any degree

* An Eſſay on the Bite of a Mad Dog. 8vo. London, 1788.

of

of certainty, as a means of prevention in theſe unfortunate caſes.

In too many inſtances, however, either from the number and ſituation of the wounds, or from the fears of the patient, we ſhall be obliged, perhaps, to content ourſelves with deſtroying the parts bitten by cauſtic, which is certainly the beſt ſubſtitute for extirpation, though it has ſometimes failed of ſucceſs even in the ableſt hands *.

The caſes, by M. Sabatier, you have favoured me with from the Memoirs of the Royal Academy of Sciences at Paris for the year 1784, are ſtrongly in point, and confirm the neceſſity of deſtroying the wounded parts. With your leave I will copy them. — "On the 27th of "February, 1784, a dog, kept by way of ſafe-"guard in a lone houſe, bit the gardener be-"longing to the houſe in the upper lip. The "wound was dreſſed in the common way, and "nothing more was done. The next day the

* See the caſe of Maſter Rowley, as communicated by John Hunter, Eſq., to Dr. Hamilton, and inſerted by the latter in his Remarks on the Means of obviating the fatal Effects of the Bite of a Mad Dog, &c. 8vo. London, 1785, page 211.

"ſame

" ſame dog, which had been ſhut up, but with-
" out being ſuppoſed to be mad, flew at a
" young man, who went to carry it ſome vic-
" tuals, and bit and ſcratched him in ſeveral
" places. The dog was immediately killed.
" Twenty-eight hours after the accident M.
" Sabatier applied liquid butter of antimony to
" the wounds, which were more or leſs conſi-
" derable, and twenty-five in number, and to
" the ſcratches, of which he reckoned fifty.
" The moſt conſiderable were in each hand
" and fore arm, in the right ſhoulder, and in
" the left leg. Theſe were kept open a conſi-
" derable time, and the patient did well; but
" the gardener, who thought himſelf ſafe, and
" would not believe the dog had been mad,
" began, on the 14th of April, fifty-five days
" after the accident, to loſe his appetite; the
" day following he complained of a pain in
" the wound, of a ſevere oppreſſion at his ſto-
" mach, and of a deſire to vomit. The ſymp-
" toms of hydrophobia came on the ſame day.
" He was carried to the Hotel Dieu at Paris,
" and died on the 16th.

" M. Sabatier relates another caſe, which
" happened in 1775, of a ſoldier, bit alſo by a
" mad dog, where the cauſtic was applied
" with

" with ſucceſs; while another man, who had " been bitten by the ſame dog, was ſeized " with hydrophobia on the fifty-ſecond day, " and died in twenty-four hours."

The method propoſed by Dr. Haygarth, " of waſhing the wound with cold water, not " ſlightly and ſuperficially, but abundantly, " and with the moſt perſevering attention; in " bad caſes for hours; and after a plentiful " affuſion of cold water, but not ſooner, apply- " ing warm water *," is highly commendable for its ſimplicity, and cannot be too much known and inculcated, as it promotes the wiſhed-for deſign, and gives time for medical aſſiſtance.

The method you have been ſo good as to communicate to me, as propoſed by Profeſſor Mederer, of Fribourg, and which conſiſts in waſhing the wound thoroughly, firſt with a dilute ſolution of lunar cauſtic in water, (in the proportion of thirty grains of the cauſtic to a pint of water) and afterwards with warm water, ſeems alſo to be highly deſerving of notice. At the end of the Profeſſor's paper I obſerve ſome points of theory concerning the ſuppoſed action of ſea water, in theſe caſes, from its al-

* See London Medical Journal, Vol. X. page 296.

kaline

kaline contents, which may probably by ſome be deemed too fanciful; but this is a circumſtance of no great conſequence; and if you give the preſent remarks a place in the Medical Facts and Obſervations, I ſhall requeſt you to add Profeſſor Mederer's letter and other papers* on this ſubject, by way of note, or in any

* Cel. SIMMONS, Med. Londin. *S. D.* M. DE MEDERER, Profeſſor Friburgenſis.

De efficacia lixivii matricalis dilutiſſimi, ideo non amplius cauſtici, ſed reagentis remedii contra hydrophobiam prophilactici perſuaſus nuper in litteris ad te datis rogavi, qui, ſi quis a beſtia rabida demorſus ſe curandum ſiſteret, illum methodo in ſyntagmate de rabie canina a me deſcripta tractare velis ut ſic & uſu confirmaretur, quod ratione demonſtratum eſt; nam cum id rogarem, propriis experimentis certis, quibus theoriam meam comprobarem, adhuc deſtitutus fui. Verum non diu poſt accidit, ut duæ a fele rabida demorſæ ancillæ, & nuper denuo, ut tres a cane rabido admorſæ perſonæ præfata mea methodo curarentur, & omnes feliciter conſervarentur; quorum factorum ſpeciem ſimulque læſionis & ſanationis hiſtoriam ex teſtimoniis authenticis in hunc finem annexis colligere licet.

Cum verba tantum moveant, exempla vero trahant, jam nunc futurum exiſtimo, ut Philiatrorum nemo amplius dubitet, data quavis occaſione pharmacum non cauſticum (nam lapidis cauſtici grana triginta in aquæ libra una ſoluta non amplius adurunt) nihilominus tamen contra hydrophobiam prophilacticum adhibere, cujus efficacia non ſolum a priori,

any other form you pleaſe, as I am perſuaded there are many readers who, like myſelf, will be glad to have a copy of them.

That

ſcilicet ratione & analogia demonſtrata, ſed & a poſteriori ipſa nempe experientia confirmata fuit. Quod ut omnes ac ſinguli quacunque artis ſaluberrimæ praxi occupati faciant, valde exopto, quo multiplicato demum experimentorum numero omne dubium evaneſcere, atque ſic tandem fieri poſſit, ut non ſolum calamitas hæc a miſeris repellatur, ſed & ceteri ea moleſtia liberentur, quam aliena miſeria affert. Nullus præterea dubito, quemquam fore, qui æque opportunam quam certam hanc curandi methodum non omni alii magis profecto ambiguæ & incommodæ præferat. Nullum enim aliud remedium prophilacticum certius hucuſque inventum eſſe, ex eo facile arguitur, quod non ita pridem adhuc a beſtiis rabidis admorſi rabie implicarentur, & ea oppreſſi, licet a peritiſſimis in arte viris & juxta normas noviſſime præſcriptas curarentur, nihilominus tamen infeliciſſime perierint plurimi; mea vero methodo tractati conſervati fuerint omnes.

Cum teſte Celſo & omnibus, qui miſeros ſitire & rabire viderunt, hydrophobia cum rabie non ſolum miſerrimum morborum genus, ſed etiam eo oppreſſi in maximo diſcrimine ſint, ab hac calamitate & periculo homines conſervando hominibus maximum & diſtinctiſſimum officium præſtari, & ideo neminem, qui officium hoc præſtitit, maxima voluptate non affici neceſſe eſt, quare omnes, quibus fortuna, aliquem hac mea methodo ab iſta calamitate conſervare contigit, ut mihi eam ſignificare, & ſic voluptatem ſuam ob hominem conſervatum communicare non graventur, etiam atque etiam rogo. Vale.

Dabam Friburgi Briſgoviæ die 1ma Sept. 1789.

Copia

That perſons ſometimes eſcape the effects of the bite of rabid animals, without any prophylactic

Copia Atteſtati ſupremæ præfecturæ Sereniſſimi S. R. I. Principis a Fürſtenberg *in valle Kinzingana.*

In ditione Sereniſſimi Principis a Fürſtenberg & quidem in ſupremæ præfecturæ vallis Kinzinganæ dynaſtia Wolfach dicta, ruſticus Andreas Ehle, ſubditus in Rankach 13tia Septembris hujus anni denunciavit, duas prædii ſui ancillas Agatham Müllerin unam, & Mariam Annam Borhoin alteram a fele rabioſa demorſas fuiſſe.

Mandabatur illico provinciæ phyſico & chirurgo, ut neceſſaria interim remedia adhiberent, ſed & eodem tempore ad D. Profeſſorem Mederer Friburgum tabellarius miſſus eſt, qui eundem rogaret, ut ſuum contra hydrophobiam laudatum remedium mittere, modumque applicandi edicere, vel ſi non gravaretur, ipſus venire vellet.

Venit ipſe ea, qua ob longam diſtantiam licuit, celeritate; ancillas morſu offenſas comitante Domino Conſiliario intimo & ſupremo Præfecto, pone inſequentibus D. dynaſtiæ Conſiliario, D. Phyſico & Chirurgo inviſit, vulnera inſpexit, ſuo remedio lavit, deligavit, addito ſimul mandato, ut hæc curandi methodus iterato repetatur, nullum præter h c aliud remedium applicetur, poſtea vero vulnera conſuetis ſanandi regulis curentur.

Per longius deinde tempus hanc ob cauſſam hic loci commoratus prædictus D. Profeſſor de læſarum ancillarum circumſtantiis a loci chirurgo indies edoctus, eaſdemque cum ante abitum adhuc viſitaret, ſanatas fere reliquit, domumque ſuam repetit.

lactic means being employed, is certain, and muſt be accounted for from ſome particular ſtate

Nos nunc ex integro ſanatas curataſque eſſe cernimus, quod unice ſanandi methodo prædicti D. Profeſſoris in acceptis referendum eſſe putamus.

In cujus rei teſtimonium patentes haſce litteras majori ſupremæ Præfecturæ noſtræ ſigillo munitas dedimus.

Wolfachi die 8va Decembris 1783.

(L. S.) Cancellaria ſupremæ Præfecturæ Sereniſſimi Principis a Fürſtenberg in valle Kinzingana.

Copia Atteſtati D. provinciæ Phyſici D. Wegbecher.

Infra ſcriptus a ſupremo huiate Præfecto die 13tia Septembris h. a. mandatum accepi, ut me cum chirurgo Rankachium dynaſtiæ Wolfacenſis vallem conferrem, ibidemque duarum a fele rabida demorſarum ancillarum curam gererem. Verum cum mihi notum eſſet, D. Mederer Profeſſorem Friburgenſem certum contra rabiem habere remedium prophilacticum, rogabam ampliſſimam Præfecturam ſupremam, ut præfato D. Profeſſori caſum hunc nuntiaret, ſimulque ab eo requireret, ut vel ipſe venire, vel remedium ſuum cum inſtructione, quomodo applicari debeat, mittere velit.

Adveniens in Rankach intellexi, felem, quæ ambas ancillas momorderat, tribus diebus abſentem fuiſſe, nempe non, ut hucuſque ſolebat, mane & veſpere, dum vacæ mulgebantur, ad ſtabulum veniſſe, ubi ab ancillis prædictis ſemper lacte paſcebatur. Quarta autem die mane iterum ante domum comparuiſſe, & in ibi conſiſtentes ancillas irruiſſe, unius pedem

ſtate of the habit at the time. We daily ſee inſtances where inoculation fails, though the inſertion

dem lædens; inde verberibus deterrita alteram petiit, pedem primo, ab hoc vi depulſa ejuſdem ancillæ manum mordens; tandem in terram depreſſam felem a ruſtico ad ancillarum clamorem advolante furca interfectam fuiſſe.

His in adventu meo auditis juſſi, ut felis necata aperiretur, apertamque inſpiciens inveni, linguam aridam, tumidam & uſquequaque nigram, œſophagum vero & aſperam arteriam cum maxima parte pulmonum inflammatum.

Ex his & ex factis præmiſſis judicabam, felem revera rabioſam fuiſſe, ideoque morſuum vulnera dilatari, muria lavari & unguento digeſtivo obligari juſſi, quod & illico factum fuit.

Quamprimum D. Profeſſor Mederer advenit, ego & ipſe cum ſupremo Præfecto D. Schwab, cum præfecturæ Conſiliario D. Battie & Chirurgo D. Schroff inviſebamus admorſas, quæ de fato ſuo ſollicitæ & triſtes, clavi S. Huberti in vola manus aduſtæ, a D. Profeſſore bono animo eſſe jubebantur, auxilium ipſis infallibile promittendo.—Fidebant miſeræ promiſſis eo certius quod anno vix dum præterito undecim perſonas morſu rabioſi canis læſas ab eodem D. Profeſſore ſanatas fuiſſe atteſtabamur.

Aperiebantur earum vulnera obligata, lixivio, quod ex granis triginta lapidis cauſtici chirurgorum & libra una aquæ communis paratum fuit, diligenter eluebantur, & carpto mox dicto lixiviæ madefacto denuo obligabantur, quæ operatio ut una alterave vice repeteretur, juſſit, aliud quodvis remedium

 applicari

insertion of the variolous matter is carefully done, and other patients inoculated at the same time,

applicari prohibuit, vulnera vero methodo vulgari curanda præcepit, quod accurate factum fuit.

Vigesima tertia Septembris denuo invisebamus ego, D. Professor Mederer, D. Dr. Metzler Comitis Bissing Medicus & Consiliarius, D. Consiliarius Battie & D. Chirurgus Schroff demorsas, & illas fortis suæ certiores solatii plenas invenimus. —Vulnera erant moderate inflammata, optimam suppurationis speciem prodentia; in manu vero ancillæ alterius detegebamus, morsum, quem prius tantum superficialem credebamus, per cutem penetrasse; dilatari itaque & hoc vulnus — præ-dicto lixivio elui, & eo, quo prius modo obligari præceptum est.

Nunc post septimanas circiter quinque vulnera omnia sine ullo malo symptomate sanata, & ancillæ sanæ & alacres esse deprehenduntur, quod methodo rationali D. Professoris attribuo. In cujus testimonium hasce litteras proprio sigillo munitas scripsi.

Wolfachi 6ta Decembris 1783.

(L. S.) Wegbecher Medicinæ Doctor, Sereniſſimi Principis a Fürſtenberg Conſiliarius, & dynaſtiarum Wolfach & Haſlach Phyſicus.

Præpositum atteſtatum propria manu ſereniſſimi Principis a Fürſtenberg Conſiliarii — Med. Doctoris & ſupremæ præfecturæ in valle Kinzingana Phyſici ordinarii, D. Jacobi Wegbecher

time, with the ſame matter, and the ſame lancet, have the diſorder. May not the ſame thing happen

becher hic Wolfachi ſcriptum fuiſſe appreſſo cancellariæ minori ſigillo atteſtatur

Wolfachi 8va Decembris 1783.

(L. S.) Cancellaria ſupremæ præfecturæ Sereniſſimi Principis a Fürſtenberg in valle Kinzingana.

Copia Atteſtati Chirurgi jurati D. Schroff.

Infra ſcriptus per ſupremam præfecturam cum D. Phyſico D. Wegbecher ad duas illas a fele rabioſa in Rankach demorſas ancillas miſſus fui, quas læſas inveni, ut ſequitur.

Agatha Müllerin 18 annorum, in crure dextro, parte media anteriori duplicem excoriationem, parte exteriori vero & ſuperiori morſum duplicem per cutem profunde in carnem ſuræ penetrantem paſſa eſt.

Maria Anna Borhoin 22 annorum in parte poſteriori & media ſuræ ſiniſtræ morſum unum duplicem per cutem profunde in carnem penetrantem — in parte exteriori brachii ſiniſtri proxima ad carpum morſum alium duplicem per cutem profunde penetrantem accepit; præterea in carpo ipſo morſus, qui primum excoriatio tantum videbatur, poſt ſuppurationem vero profunde ſub cute penetraſſe inventus eſt.

Singula cutem penetrantia vulnera a me dilatabantur, morſus duplices penitus conſcindebantur — prima vice tantum ſecundum ordinationem D. Doctoris Wegbecher, poſtea vero ſemper ſecundum methodum D. Profeſſoris Mederer curabantur, cui ſoli adſcribo, quod demorſæ ſeptimana quinta, ſine

happen in the bite of a mad dog? — I remember a caſe of a child at the breaſt being for a fortnight

ullo malo ſymptomate ſanatæ fuerint, & adhuc omnimode ſanæ & alacres ſint.

Quod propria manu ſigilloque atteſtor *Wolfachi* 6ta Decembris 1783.

CONRADUS SCHROFF, chirurgus juratus.

(L. S.)

Præpoſitum Atteſtatum propria manu huiatis chirurgi jurati Conradi Schroff ſcriptum eſſe, appreſſo minori ſigillo teſtatur *Wolfachi* 8va Decembris 1783.

Cancellaria ſupremæ præfecturæ Sereniſſimi Principis a Fürſtenberg in valle Kinzingana.

(L. S.)

Nos ad ſupremam præfecturam vallis Kinzinganæ conſtituti ſereniſſimi Principis a Fürſtenberg Conſiliarius intimus & Præfectus ſupremus nec non Conſiliarii & officiales atteſtamur præſentibus, duas illas ancillas in ruſtici Andreæ Ehle Domu in valle Rankach præfecturæ Oberwolfach decima tertia Septembris 1783, a fele rabida demorſas, ſcilicet Annam Mariam Borhoin ex præfectura Oberwolfach & Agatham Müllerin ex valle imperiali Hammerſpach methodo a Friburgenſi D. Doctore & Profeſſore Mederer propoſita feliciter ſanatas, hucuſque ſemper ſanas & alacres fuiſſe, & adhuc optime valere.

Wolfachi die 20 Decembris 1784.

(L. S.)

Copia

fortnight or more in a room where four or five children had the ſmall pox, and ſome of them the

Copia Atteſtati D. D. Conſiliar. aulic. & Medic. D. Poſch *& Chirurgi* Panck.

David Mayer murarius triginta trium annorum, Bubſhemii in cæſ reg. A. A. dynaſtia Hochenberg natus, 24ta Julii anni currentis in via Hüſinga Doneſchingam ducente a cane rabido per togam ex cannabe textam & induſium in cubitum dextrum ita admorſus fuit, ut vulnus rotundum quadrantem pollicis latum & profundum in muſculum extenſorem brevem cubiti prope flexuram ſurſum verſus penetraret.

Franciſcus Xaverius Hefler undecim annorum & trium menſium filius civis Doneſchingenſis ab eodem cane, a quo David Mayer vulneratus fuit, admordebatur in pede dextro duos pollices ſupra condilum externum. Hoc morſu duo infligebantur vulnera, primum æque rotundum quadrantem pollicis latum, medium vero profundum intrabat ſupra condilum externum inter muſculum peroneum anteriorem & poſteriorem, os tamen peroſtio ſuo adhuc tectum fuit. Secundum vero duos pollices a priori diſtans ſuper tibiam in tibiæo antico ejuſdem latitudinis, non vero tantæ profunditatis erat.

Ab hoc puero canis rabidus inſiliebat in puellam $9\frac{1}{2}$ annorum, hujatis militis filiam, Franciſcam Roeſch, & proſternebat illam retrorſum in terram. Canis hanc puellam admordebat in brachio dextro ad articulum brachii anterioris cum ſuperiore, duoque vulnera infligebat, unum ſuper cubitum in muſculum extenſorem brevem, alterum ſub cubito introrſum in muſculum cubitæum internum, utrumque quadrantem pollicis latum & profundum. Simul in ejuſdem brachii media

&

the confluent ſort, without catching the diſeaſe, though, in general, it is ſo eaſily contracted.

When

& interna parte, ubi caro muſculi radiæi interni in partem ſuam tendinoſam definit, per cutem nudam ſauciabatur vulnere fabæ italicæ magnitudine, & $\frac{1}{4}$ pollicis profunditate. Præterea eidem puellæ idem canis rabioſus morſu inferebat vulnus in labium oris ſuperius verſus ſiniſtram lentis vulgaris magnitudine.

Poſt hæc facta nos, ut in rei veritatem accuratiſſime inquiriremus, & miſeris auxilium efficaciſſimum afferemus, illico appellati fuimus.

Inveniebamus tunc has tres admorſas perſonas ſine ullo adverſo ſymptomate.—Vulnera igitur illico dilatabantur, & poſtquam ſanguis ad ſufficientem quantitatem efluxiſſet, illa lixivio, quod ex lapide cauſtico gr. XXX & ſufficienti aquæ quantitate libr. I. paratum fuit, ſuadente D. Matthæo de Mederer, &c. &c. eluebantur, nec non carpto eodem lixivio madefacto deligabantur, & ſecundum artis principia curabantur. Vulnera hoc lixivio per Menſem in ſuppuratione conſervabamus, & toto hoc curationis tempore nullum adverſum ſymptoma obſervabamus.

Elapſo menſe vulnera jam penitus erant ſanata, & hæ tres perſonæ hucuſque adhuc optime valent. Quamobrem hujus beneficii nunquam non memores Domino Inventori præſantiſſimi hujus remedii ob ejus divulgationem gratias referimus debitas, & hiſce facta hæc palam conteſtamur,

Atteſtatum præpoſitum ab huiate Sereniſſimi Principis Conſiliario aulico & medico D. Poſch & ab huiate Sereniſſimi Principis Chirurgo de Panck manu propria ſubſcriptum &

Conſuete

When the means of prevention have been neglected, or have failed, and hydrophobia has actually

Conſueto illorum ſigillo munitum, ſimilibus vero ab his exhibitis Atteſtatis omnimode credendum eſſe, ſub ſigillo majori Cancellariæ Regiminis Sereniſſimi Principis a Fürſtenberg & ejuſdem Secretarii Nomine manu propria ſubſcripto hiſce in optima forma affirmatur.

Doneſchingæ 23 Decembris 1784.

Sereniſſimi Principis a Fürſtenberg
(L. S.) Regimen hujas.
FREY Conſil. & Secretar.

Copia Atteſtati Regiminis Sereniſſimi Principis a Fürſtenberg.

Nos ad Regimen Sereniſſimi Principis a Fürſtenberg conſtituti Præſes, Cancellarius, Conſiliarii intimi & aulici atteſtamur hiſce—die 23tia Julii anni currentis nobis durante ſeſſione a politiæ miniſtris annunciatum fuiſſe, quod canis rabidus in oppidum irruiſſet, & homines & pecora læſiſſet, nec non quod jam diſpoſitio neceſſaria facta eſſet partim, ut homines læſi convenienter curarentur, partim ut canis rabidus deprehenderetur & interficeretur, nec non ut pecora læſa majoris ſecuritatis cauſſa illico necarentur, & terra abſconderentur.

Ex continuo facta inveſtigatione ſequentia inventa fuere. Canis prædictus erat alienus, hic loci ignotus, fuſcus, villoſus, venaticus, armilla coreacea aurichalco præfixa cinctus; veniebat ſuper viam publicam Huffinga ad oppidum noſtrum hora media undecima ante meridiem. Adhuc in diſtantia 200 paſſuum ante oppidum inſperato & non irritatus irruebat in ſuper viam mox dictam ambulantem Davidem Mayer murarium

actually taken place, what are the moſt proper remedies to be adopted? The antiſpaſmodic and

rium ex Bubſheim atque inferebat ipſi vulnus in cubitum dextrum. Ab hoc ſecum portato tigni fruſto repulſus canis prædictus capite ſemper demiſſo, lingua exſerta, ore ſpumante, & cauda retracta directe ſe in oppidum noſtrum conferebat, & ſtatim ad primam domum canem ad eam in platea ambulantem opprimebat. In oppidum ingreſſus lacerabat gallinam ipſi obviam, & intrabat in domum apertam & ejus conclave inferius, in quo bona fortuna neminem inveniebat. Ex hac ſe in partem exteriorem hujus loci recipiebat, & adgrediebatur Franciſcum Hefler, puerum undecim annorum ſub foribus paternæ domus nudis pedibus ſtantem, & in ejus pedem ſiniſtrum dentes adeo defigebat, ut affixus pedi a puero ultra tres paſſus in domum retraheretur, ubi a patre & fratre majore advolantibus fuſtibus dejiciebatur.

Vix vero 50 paſſus abhinc invadebat a tergo Franciſcam Roeſchin, puellam novem annorum in platea exiſtentem, proſternebatque eam in terram, & morſu fauciabat brachium ejus dextrum, & labium oris ſuperius.

Tunc præciſe ſubulcus gregem ſuam domum cogebat. Prædictus canis rabidus iterato in eam penetrabat, & tres porcos vulnerabat. Poſtea ex loco ſupra viam Schweningam ducentem pedes efferebat; ante ultimam domum vero adhuc canem & felem per plateam incedentem aggrediebatur & vulnerabat. Tandem extra oppidum circiter 150 paſſus procumbebat ad viam publicam in foſſa ſicca & ceſpite obducta, ubi a Principis chirurgo D. de Panck glande in maxillam inferiorem ictus fuit.

Hoc

and nervous medicines, which are ſo generally had recourſe to in theſe caſes, have ſo often failed

Hoc ictu vulneratus canis alia via ſe denuo in oppidum recipiebat, & ſtatim primo ingreſſu allata agreſſus, gallum & gallinam ſauciabat.—Ultro in locum irrupturus, a venatore Carolo Goenner ſecundum glandis ictum in ventrem accipiebat, accepto ſe in ſtabulum ex adverſo apertum, & per hoc in domum ipſam recipiebat, ubi reclusus a Celſ. Regiminis ſcriba Scheidegg primo punctibus vulnerabatur, & tandem glandis ictu trajiciebatur. Canis hic nunquam, nec verberatus, nec punctus aut ictus vocem edidit.

De perſonis vero ſauciatis referebat Conſiliarius aulicus & principis medicus ordinarius D. Poſch, nec non principis chirurgus D. de Panck, quorum curæ traditæ fueræ, quod prædictæ perſonæ methodo D. Profeſſoris Friburgenſis de Mederer tam fortunato ſucceſſu tractatæ fuerint, ut non ſolum tempore curæ ſemper alacres, ſed etiam quatuor poſt ſeptimanas jam penitus ſanatæ, & hac cura ab omni periculo rabiei immunes redditæ fuerint.

Sicut & hæ perſonæ poſt decurſum 5 menſium adhuc optime valent.

Ad tuendam veritatem & majorem confirmationem prædictorum hoc Atteſtatum majori nobis commiſſo Regiminis Inſigni corrobari, & conſueto more per Secretarium noſtrum ſubſcribi juſſimus. Quod factum eſt *Doneſchingæ* die 23 Decembris 1784.

Sereniſſimi Principis a Fürſtenberg
(L. S.) Regimen hujas.
FREY Conſil. & Secretar.

Methodus

failed of ſucceſs, that I have long determined, in my own mind, ſhould any inſtance of this dreadful

Methodus facillima & certiſſima Homines & Animalia cuncta a Beſtiis rabioſis admorſa conſervandi, ne quoque in rabiem deveniant.

§. 1. In curatione hominis a beſtia rabida (cane aut felle) demorſi id imprimis agendum eſt, ut virus vulneri immiſſum deſtruatur, priuſquam abſorptum atque univerſæ humorum maſſæ commixtum fuerit. Hoc virus per ſeptimanas, menſes loco, cui adplicatum fuit, iners bona fortuna hæret.

§. 2. Quo fine exſciſſio aut inuſtio vulneris probatiſſimum eſt & princeps remedium a Celſo jam recommendatum; quomodo hæc illave inſtitui debeat, cuilibet Chirurgum notum erit.

§. 3. Verum, cum hæc medendi methodus, quia crudelis adparet, ſæpe repudietur, impoſſibilis ſæpe ſit, his in caſibus ſecuturæ rabiei periculum perfiſtit, niſi alia iſthæc ratione avertatur.

§. 4. Cum experientia certo conſtet, ex remediis omnibus hactenus eo ſcopo laudatis nullum infallibile fuiſſe, aliorum auxiliorum tentamen nemini abſonum videbitur, præſertim ſi eorum efficacia prævideri poſſit, & obſervationibus jam comperta fides ſit. Quale remedium eſſe videtur illud a Profeſſore Friburgenſi de Mederer nuper publici juris factum, lixivium nempe matricale ita dilutum, ut non amplius adurat. Methodus illud adhibendi ſequens eſt.

§. 5. Quodlibet vulnus ab animali rabido aut de rabie tantum ſuſpecto admorſum omnium primo, ſi anguſtum & profundum ſimul fuerit, lege artis dilatetur, tum lixivio ſupradicto

dreadful diſorder fall under my care, to change the method of treatment, and try the effects of tonics.

The

dicto (§. 4) eluatur, (ex granis viginta lapidis cauſtici Chirurgorum & libra una aquæ ex tempore parato,) ſi locus non nimis ſenſilis illud permittat, carptis eodem ebriis deligetur, ſi vero locus admodum ſenſilis eſſet, lixivio mox dicto probe abſtergatur, dein aqua communi tepida rurſus eluatur, ac denique ligaminibus ſiccis obligetur.

§. 6. Deterſio lixivii ope aliquoties per diem iteretur, tam diu, quam per inflammationem licuerit.

§. 7. Si vulnere jam inflammato vocaretur Chirurgus, exſpectanda ei ſuppuratio eſt, atque tum methodo ſupra deſcripta (§. 5) ulcus tractandum.

§. 8. Si ſerius adhuc, vulnere nimirum pro parte, aut integrum jam ſanato accerſeretur, illud lapide cauſtico denuo exulcerare, atque ulcus poſt deciduam Eſcaram lixivio ſæpius memorato eluere & deligare debet. Non perinde eſt hic, lapis cauſticus aliudve cauſticum recipiatur, ille enim partes animales & cum his virus rabioſum multo certius deſtruit, quam quodcumque aliud cauſticum ex vitriolorum proſapia.

§. 9. Vulnera quæcumque ex dictis (§. 3 vel 5) methodis tractata cæterum juxta generales artis leges ſanantur.

§. 10. Cum hac ratione virus rabioſum admorſo in loco deleatur, atque ideo nil de eo reſorberi poſſit, omnia remedia interna, externaque ad veneni reſorptionem impediendam, illudve jam reſorptum deſtruendum hactenus laudata plane ſuperflua ſunt.

§. 11.

The plan I have propoſed to myſelf would be, (after ſuch previous evacuation as might ſeem

§. 11. Omnes (§. 3 vel 5) dictis methodis tractati rabie corripi omnino nequeunt. Quod ſi vero omiſſionis cauſa accideret, in horum infortunatorum hominum cura nullum philantropiæ officium prætermittatur, hoc eo magis fieri poteſt, cum convicti modo ſimus, ejuſmodi infortunatos homines non mordere, & ſalivam ſine morſu non inficere.

§. 12. Verum non quilibet admorſus, qui ex angore, ne rabidis moriatur, moeſtus eſt & meticuloſus, eadem ex cauſa varii generis ſymptomatibus, hydrophobiæ analogis urgetur, pro rabido ſtatim declarandus eſt. Inde accidit, quod tam diverſis ſæpe ſibi contrariis remediis adeo multi a rabie ſanati legantur. Anxiis his ſolatium præbeatur, & ſi dicta (§. 5 = 8) methodo nondum tractati ſunt, eadem tractentur.

§. 13. Vera rabies communiter inter tres ſeptimanas totidemque menſes erumpit; quod de multo citiore vel multo tardiore ejus eruptione ſcriptum habetur, id incertum eſt.

§. 14. A prægreſſo vehementi corporis, animive motu ut plurimum excitatur, vulnus adhuc apertum vel jam clauſum de novo dolere incipit, dolores centrum corporis gradatim petunt, pleroſque alternum frigus adoritur cum laſſitudine, febris ſymptomatibus conſuetis plus minuſve ſtipata, his ſe adſociat deglutiendi impotentia (unde perpetua illa ſputatio) ac inſuperabilis denique horror non ab omni ſolum liquido, verum & eo omni, quod illius ideam excitare valet.

§. 15. Utrumque hoc ſymptoma *Diſphagia* & *Hydrophobia*, eſſentiales rabiei characteres conſtituunt, ejus præſentiam illa unice definiunt.

§. 16.

ſeem neceſſary) to direct my patient to be kept as much from the light as poſſible; the bark, in ſubſtance, to be given in large quantities, and Port wine plentifully; but that every thing liquid ſhould be given from a dark-coloured, unglazed tea pot, that nothing might appear to the patient; that bark clyſters, with opium, ſhould be frequently thrown up; oil of amber

§. 16. Miſerrimum hoc morborum genus arti medicæ indomabile adhuc eſt, & cum in mox dictis (§. 15) ſymptomatibus principaliter illud conſiſtat, interna medicamenta incaſſum hæc quærit. Externa quærenda ſunt remedia, inunctio mercurialis hactenus laudata in rabie jam præſente manifeſto nociva fuit*; balneum ex aqua marina ſemper profuiſſe legitur †, profuiſſe poteſt, quia ex aqua balneo adhibita reſorberi quid & lymphæ, proprio virus rabioſi vehiculo admiſceri poteſt.

§. 17. Si balneum maris hoc in caſu ſemel juvit, id alcali ex aqua marina reſorpto certe debetur; an lixivium dilutum huic fini non imprimis utile foret? In virus ſcrophuloſum potenter agit, veneno rabioſo plus quam venereum adfine, quocum poſteriore Sauvageus tantam veneni rabidi analogiam reperiit.

§. 18. Hinc actu rabidi hydrophobia non obſtante in balneum lixivioſum provide demittendi, atque in eo tamdiu detinendi eſſent, quam fieri poteſt; *nam in deſperatis anceps remedium experiri melius eſſe, quam nullum,* Celſus jam profeſſus eſt.

* Morcau. † Tulpius.

rubbed on the vertebræ of the neck and back, and veſicatories, as ſtimulants, applied to the throat; and that, as ſoon as poſſible, the cold bath, or, what may be more eaſily uſed, the ſhower bath, ſhould be had recourſe to.

I have ſaid nothing of the uſe of mercury, which has been ſo often recommended, and found inefficacious in theſe melancholy caſes, becauſe the action of it, if there be time for it to enter the circulation, ſeems likely to counteract the bark and the other tonic remedies I ſhould wiſh to employ.

I have been confirmed in my opinion of the propriety of at leaſt making trial of the mode of treatment I have ventured to ſuggeſt, by reading ſome obſervations on the cauſe and cure of the tetanus, lately publiſhed by Dr. Ruſh, of Philadelphia *, in which he gives an account of the ſucceſs of the bark and wine, taken in large quantities, in that diſeaſe. To theſe, in one caſe, he added a bliſter between the ſhoulders, and, in another, the oil of amber in large doſes, when he ſuſpected the bark and wine began to loſe their effect.

* See the London Medical Journal, Vol. VII. page 424.

After

After aſſigning his reaſons for throwing aſide opium and nervous medicines, he proceeds to obſerve, that, having had no opportunity of ſeeing the hydrophobia ſince he had adopted theſe principles, he is unable to determine how far his reaſoning with reſpect to tetanus may be applicable to the hydrophobia; but from the ſpaſmodic nature of the latter diſorder, from the ſeaſon of the year in which it generally occurs, and, above all, from a caſe related by the late Dr. Fothergill, of a young woman having eſcaped the effects of a mad cat by means of the wound being kept open, (and which, from its ſeverity, Dr. Ruſh thinks was probably connected with ſome degree of inflammation) he aſks whether it is not probable that the ſame remedies, which have been employed with ſucceſs in the tetanus, may be uſed with advantage in the hydrophobia?

At the concluſion of his paper he very properly remarks, (and the obſervation may ſerve as an excuſe for the hints which I myſelf have ventured to throw out on the ſubject) that in a diſeaſe ſo deplorable, and hitherto ſo unſucceſsfully treated, even a conjecture may lead to uſeful experiments and inquiries.

Although the cauſe of tetanus, and of hydrophobia, may have a different origin, yet the effect in both ſeems, in ſome manner, to agree, a ſpaſmodic affection of the muſcles, and particularly of thoſe belonging to deglutition, being brought on. I am willing to allow that the nervous ſyſtem is likewiſe affected, as the diſeaſe is always increaſed upon even the approach of liquids, without attempting to drink, or by any thing of a ſhining nature.

Before I conclude this letter I ſhall take the liberty of offering a few more remarks relative to this ſubject, which have been ſuggeſted by a peruſal of Dr. Percival's hints towards inveſtigating the nature, cauſes, &c. of the rabies canina, addreſſed to Dr. Haygarth, and inſerted in the tenth volume of the London Medical Journal. The learned author ſays he does not perceive any ſtrict analogy between the action of the canine virus and that of lues venerea, ſmall pox, or of the viper; as theſe evidently affect the lymphatic ſyſtem, and their progreſs into the courſe of circulation may be readily traced, which is not the caſe with the bite of a mad dog.—" Are we then," he aſks, " fundamentally right in the idea, that the bite of a " rabid animal operates by abſorption? and

" might

" might not its effects be, at leaſt as well, if not " better, explained, by aſcribing them to local " nervous irritation, propagated at different pe- " riods of time, according to the varying cir- " cumſtances of ſenſibility and irritability to " the brain, and from thence to the fauces, " gullet, and ſtomach ?"—This doctrine is ingenious, but not ſo clear, I apprehend, as that of abſorption. It is true there is a great difference between the virus of rabid animals and of thoſe diſorders which the Doctor mentions, but yet the affection may be eaſily accounted for by abſorption, if we allow that a greater length of time is required for the action of the one than is neceſſary for the other. We know that in the ſmall pox and lues venerea the infection is found to have taken place in a few days, and in ſome caſes in a few hours; in the more active contagion of diſorders, from putrid affection by inſertion, in a very ſhort time indeed. About thirty years ſince I accidentally wounded my finger with the point of my knife in opening a woman who died of a dropſy of the ovarium, where the contained fluid was very putrid. In a very ſhort time I felt a ſlight uneaſineſs or irritation in the part, and in the courſe of the night it might be traced to the glands

above the elbow, and from thence to the axilla, where a collection of matter formed, which I am inclined to think ſaved my life; and the morning following the accident a ripe puſtule was obſerved on the punctured part.

The virus of rabid animals will certainly lie dormant for weeks, till ſome change takes place in the habit, when it becomes active. — Dr. Hamilton, in his remarks on this ſubject, (pages 99 and 108) ſays, that the time required for the virus to become active is rather uncertain; but he thinks from four weeks to three months are by much the moſt frequent, and that the firſt ſymptom is generally a pain in the part where the bite has been received, ſtretching in the courſe of the lymphatics towards the heart, or where they unite with the ſanguiferous ſyſtem.

Mr. Jeſſe Foot* thinks that "forty days is "about the general average from the bite to "the time of the coming on of hydrophobic "ſymptoms;" though there are caſes on record where the morbid affection has not ſhewn itſelf for ſome months, even to the eleventh, and,

* Eſſay on the Bite of Mad Dog.

as

as in the caſe related by Mr. Nourſe †, to the nineteenth. Still, however, in general, the appearances take place in the bitten part firſt, and from thence are conveyed by the lymphatics, or ſome other ſeries of veſſels, to the circulation. It is uncertain what ſtimulates the virus to action, but the effect ſeems to me to be the ſame as that cauſed by inoculation, &c.; a local irritation is brought on, and thence communicated to the habit.

Dr. Percival, in the paper already referred to, ſays, "the acceſſion of canine madneſs is "uncertain as to the diſtance of time from the "bite, and the ſymptoms by which it firſt "manifeſts itſelf: but frequently the cicatrix "becomes hard and elevated; pains ſhoot from "it towards the head; it is ſurrounded with "livid or red ſtreaks, and the wound breaks "out afreſh." This is coming very near the action of the venereal diſeaſe or ſmall pox, though the time is ſo uncertain. It is particu-

† Philoſophical Tranſactions, Vol. XL. page 5. See alſo a caſe of hydrophobia related by Mr. Dundas in the London Medical Journal, Vol. VIII. page 156, where eighteen months intervened between the bite and the acceſſion of hydrophobia.

larly happy for mankind that the virus of rabid animals requires so much time to vegetate, (if I may be allowed the expression) as it admits of preventives to be made use of, and none, as I have already remarked, seems so likely to succeed as excision.

Canterbury,
January 24, 1791.

III. *An Account of an uncommon Inflammation of the Epiglottis. By Mr.* Thomas Mainwaring, *Apothecary in London. Communicated in a Letter to* Everard Home, *Esq. F. R. S., and by him to Dr.* Simmons.

A Gentleman, about forty years of age, who had been exposed to the influence of cold, on the 17th of December, 1790, was attacked, in the night, with a violent pain in his throat, and a total inability to swallow.

In the morning of the 18th the symptoms were a good deal increased. The pain was not in the situation usual in similar affections, but lower down, and felt more anteriorly. When he attempted to swallow fluids, they passed readily

dily to the root of the tongue, where they were not allowed to remain for a moment, but were immediately forced out of the mouth with conſiderable violence.

Upon examining the throat, the tonſils were in a natural ſtate, as well as the palatum molle and uvula, having no tumefaction, nor were they even materially redder than common, ſo that in this view of the parts there was no appearance of diſeaſe; but upon pulling the tongue forwards, and looking down into the throat, the epiglottis was immediately brought into view, in a very unnatural ſtate, and with a very extraordinary appearance: it was much ſwelled, extremely red, and looked by no means unlike the glans penis when diſtended with blood in its erected ſtate. It ſtood directly up, ſo that nothing could paſs over it, and there was very little room laterally between it and the ſides of the pharynx. All the other parts were apparently free from diſeaſe.

A bliſter was applied externally to the throat; leeches were alſo made uſe of; but there did not appear to be any abatement from either of theſe modes of treatment: the complaint continued, with little or no diminution, till the

20th,

20th, when the ſwelling, or, more properly, the ſenſibility of the epiglottis, was ſo far gone off as to allow the patient to ſwallow ſmall quantities of fluids, and by the 23d he could, with ſome pain and a little difficulty, take ſolid food.

As it is intended by the narration of this caſe principally to point out the uncommon circumſtance of an affection of the epiglottis, and that entirely independent of the other parts, the mode of treatment, particularly as it did not appear very efficacious, has been, in a great meaſure, paſſed over.

Strand,
February 9th, 1791.

IV. *Cases of the Extraction of the Cataract; with practical Remarks. By Mr.* Richard Sparrow, *one of the Surgeons to the Charitable Infirmary, Dublin; and Member of the Royal College of Surgeons in Ireland. Communicated in a Letter to* William Lister, *M. D. Physician to Saint Thomas's Hospital in London, and by him to Dr.* Simmons.

CASE I.

IN the month of October, 1788, I was consulted by the Rev. Mr. Johnson, Curate of Longford, for a complaint in his eyes, which he informed me had, for upwards of three years, impaired his sight so much as to disqualify him for performing divine service.

The account he gave me of his disease was, that, in the summer of 1785, after working in his garden till he was rather warm, he took off his wig, and laid a wet napkin on his head, (which it seems was a frequent custom of his); that some short time after he was attacked with severe pain in his head, which in four days was succeeded by so great a dimness of his sight, that he could not distinguish a letter in a book.

Having

Having applied to ſome country practitioners, whoſe preſcriptions afforded him no relief, he came to Dublin, and there, at different times, put himſelf under the care of a phyſician and an oculiſt, both of whom miſtaking his caſe for an affection of the optic nerve tending to gutta ſerena, put him under various courſes of medicine, ordered him ſometimes warm, ſometimes cold bathing, large and frequent topical bleedings, bliſters, ſetons, &c., which had no other effect than that of impairing his general health.

It was not for a year and a half after the firſt attack that the real nature of his complaint was diſcovered by two phyſicians of eminence in this city: they told him he had cataracts, and judiciouſly adviſed him to lay aſide all farther uſe of medicine; but, from his advanced age, were, I believe, little inclined to recommend a ſurgical operation. Tired, at length, with his diſtreſſed ſituation, he determined on ſeeking relief at the only ſource from which it could poſſibly be obtained — the hand of the ſurgeon, and with this intention he called upon me.

I examined his eyes, and perceived a cataract in each; that in the right eye perfectly opaque, the left not quite ſo, but permitting very little uſeful

uſeful viſion. There was a remarkable relaxation of the tunica conjunctiva in both eyes, folding up near one half of the cornea, and looking like a tear in each eye. In other reſpects his eyes had that appearance which experience teaches us is favourable to the ſucceſs of an operation, viz. the ball of the eye of the natural ſhape and fulneſs; the cornea tranſparent, and free from all opacity; the pupil of the natural ſize and ſhape, dilating and contracting freely; but, above all, the power of diſtinguiſhing any opaque body placed between the eye and the light, the only certain teſt of the ſound ſtate of the optic nerve.

His general health was now reſtored, nor was he ſubject to pain in any part of his head. My chief objection, therefore, was his advanced age, he being turned of ſixty-five years. At my requeſt a conſultation was held, in which every objection to operation was laid before him; but ſuch was his impatience to obtain a chance of reſtoration of ſight, that he paid little attention to our objections, and declared his fixed determination to ſubmit to an operation as ſoon as it could with propriety be attempted. He then went to the country, and returning in November, called again on me. The only preparation

paration I thought neceſſary was a gradual diminution of the uſe of animal food for a fortnight; and for about a week previouſly to the operation he was ordered to bathe his feet in warm water every night at bed time. It was his wiſh to have only the right eye operated on, keeping the other in reſerve in caſe of failure of the firſt.

As the extraction of the cataract is an operation confeſſedly one of the niceſt in its execution, and the moſt important in its effects, that the chirurgical art can boaſt of, I flatter myſelf that a detail of the different ſteps of it will not be thought tedious in a caſe like the preſent, which has been attended with the moſt complete ſucceſs.

Method of Operating.

For the operation a chamber was choſen into which only a moderate degree of light was admitted; as a bright light irritates the eye, makes it unſteady, and forces the pupil to contract too much.

On the 20th of November, 1788, I proceeded to operate in preſence of Dr. Clarke and ſome other medical gentlemen of this city. Having placed the patient on a low chair, with his

his right eye obliquely to the light, and being ſeated oppoſite to him, the upper eyelid was raiſed by my aſſiſtant and friend, Mr. Richards, and whilſt I depreſſed the lower one with my right hand, I with my left paſſed a knife, having a long and narrow point, through that part of the cornea next the external angle of the eye, within half a line of its junction with the ſclerotica, and a little higher than the center of the pupil, and puſhing it forwards to the oppoſite ſide, made nearly a horizontal ſection of full one half of the cornea. The aqueous humour immediately flowing out, the lids were cloſed, and the eye ſuffered to reſt for a minute or two: the patient was then deſired to open the eye, when, having introduced the inſtrument recommended by De Wenzel to divide the capſule, the opaque cryſtalline was puſhed out of the eye by the contraction of its muſcles, without the neceſſity of any external preſſure whatever on the globe. After gentle friction on the cornea to collect any fragments of the cataract in the pupil, nothing appearing, and the pupil ſeeming perfectly clear and round, the eye was cloſed.

Having been in the habit of applying ſome ſedative application to the eye after this operation,

tion, which, from the neceſſity of frequent renewal, I had found very inconvenient to the patient, in this caſe I made uſe of nothing more than a bit of fine ſoft lint, ſecured with a light compreſs and roller, and the patient was laid in bed on his back, with his head inclined to the left ſide. During the ſhort time the eye was ſuffered to remain open, after the operation, the patient could diſtinguiſh the panes of glaſs in the oppoſite window.

Upon examination of the cryſtalline, it was found of the natural ſize; its center of a very firm conſiſtence, and of a dark topaz colour, while the circumference, which was of a whitiſh colour, was ſoftened to the conſiſtence of jelly.

On the day of the operation, and the two ſucceeding ones, he was quite free from pain or uneaſineſs in the eye.

On the fourth day he could diſtinguiſh, through the bandage, when the window ſhutters of the chamber were opened or cloſed.

On the fifth day, the eye became more ſenſible, and watered a good deal; the lids ſtuck together, and gave ſome uneaſineſs: this probably aroſe from a ſevere change in the weather. He was adviſed to apply his ſaliva on the end of his finger

finger to the edges of the eyelids when they adhered; and this ſimple application he always found removed the adheſion, and gave him eaſe.

On the ninth day, the irritation having ſubſided, I removed the bandage, and opened the eye. Some inflammation appeared on the lower part of the conjunctiva; the wound of the cornea was perfectly united; the eye naturally full; the pupil of the natural ſhape, ſize, and clearneſs: he could diſtinguiſh the different objects round the chamber, and could even ſee the hands on my watch. The eye was cloſed, and covered as before. He was allowed a more generous diet.

On the eleventh day, he could tell the hour by my watch.

On the ſeventeenth day I removed his bandage, and pinned a bit of green ſilk to his night-cap. The dilatation and contraction of the pupil were now nearly natural. He was ordered to bathe the eye with cold water.

On the twenty-fourth day, with the aſſiſtance of a proper glaſs, he could read a newſpaper, and in a week more returned to the country, his eye and viſion being then in the following ſtate:

The eye of the natural ſize and ſhape; the cicatrix of the cornea ſcarcely perceptible, and ſo cloſe to the ſclerotica as to give no impediment whatever to viſion; the pupil a little ſmaller than natural, but its ſhape, dilatation, and contraction perfect. With the aſſiſtance of a convex glaſs he could ſee to read the ſmalleſt print as well as he ever did in his life. The tunica conjunctiva, which had been ſo much relaxed previouſly to the operation, had now recovered its tone, probably from the degree of inflammation neceſſarily attending the operation.

In the courſe of two years, which have now elapſed ſince the operation, I have had many letters from this gentleman, and have often ſeen him in town. His ſight is as perfect, when aſſiſted by a proper glaſs, as it was at the age of twenty; and ſince a month after the operation he has conſtantly gone through the whole of his duty as a curate with as much eaſe to himſelf as if his ſight had never been affected.

CASE II.

In the month of September, 1789, I was conſulted by Mr. Pollen, of Carlow, for a complaint in his eyes, which deprived him of all

uſeful ſight. Upon examination I found he had cataracts, which had been preceded by the ordinary ſymptoms, gradually increaſing from the firſt attack, two years before, to that time, when he was ſo blind as to be able to diſtinguiſh little more than light from darkneſs. The appearance of his eyes and the colour of the cataracts were favourable for operation; but he was turned of ſixty years of age, was very rheumatic, and, from a habit of drinking freely after dinner ſince his ſight became impaired, he had got a fulneſs and redneſs in his face which ſhowed a conſiderable determination to the head. Theſe circumſtances, however, were by no means ſufficient to forbid the operation where the appearance of the eyes was ſo favourable; I therefore gave it as my opinion that his chance of reſtoration to ſight was conſiderable. He immediately determined on the operation.

To obviate any inflammatory tendency he was put on a ſtrict antiphlogiſtic regimen for about ten days. I then extracted the opaque lens from the left eye by making an horizontal ſection of the inferior half of the cornea, through which the cataract inſtantly ruſhed, accompanied, as nearly as I could gueſs, by about half a tea-ſpoonful of the vitreous hu-

mour. This accident was, I believe, occaſioned by a violent involuntary motion of the muſcles of the eye, for my aſſiſtant, Mr. Richards, made no preſſure whatever on the globe: the eye was cloſed, and ſuffered to reſt, to prevent any farther flow of the vitreous humour, which, notwithſtanding this precaution, took place in ſome degree. On opening the lids, the pupil appeared much dilated, but perfectly clear. I then cloſed the eye, and covering it with a bit of dry lint, a thin compreſs, and roller, laid the patient in bed, with his head inclined to the right ſide.

The cataract was the largeſt I had ſeen; it was of a dark brown colour, the edges, as uſual, being lighter in colour, and ſofter in conſiſtence.

Immediately after the operation, while I was taking ſome blood from him, he aſſured me that the wound of his arm gave him more pain than that of his eye.

On the day of the operation he had a ſenſation in the eye as if it wanted to open, a kind of vibratory feel, and, as he expreſſed it, frequent bright flaſhes of light ſeemed to come from his eye, ſo that he imagined candles were lighted in his chamber: he had alſo a flow of

tears,

tears, but unattended with heat or pain. Notwithſtanding theſe ſenſations, he ſlept perfectly well, and next day found his eye quite eaſy. The ſenſation of flaſhes of light returned at intervals.

On the third day he complained of no uneaſineſs, but ſtill perceived the flaſhes of light. I removed the bandage to try if any thing was amiſs. The eye, through the lids, appeared nearly as full as the other, and without opening it he could readily diſtinguiſh the different degrees of light admitted into his chamber for the purpoſe.

On the fourth and fifth days he was ordered to apply his ſaliva to the eyelids when they adhered or were uneaſy, which always gave him relief.

On the ſixth day he was permitted to get out of bed.

On the eighth day I opened the eye. The wound of the cornea was perfectly united; the eye ſeemed naturally full; the pupil clear, ſomewhat dilated, and of an oval form obliquely from ſide to ſide, the direction, I ſuppoſe, in which the cryſtalline had paſſed through it; with conſiderable turgeſcence of the veſſels of the tunica conjunctiva. He knew his wife and

friends, and could tell the colour of different objects. The eye was closed, and covered as before. Encouraged by these favourable circumstances, he, without my knowledge, indulged himself freely in the use of animal food and port wine, which, in a habit like his, kept up a degree of inflammation in the eye for some time, that made the application of a blister necessary. This soon removed all uneasiness, and his sight gradually became stronger.

On the twenty-fifth day from the operation, having got a glass which enabled him to read moderate-sized print, he returned to the country. I have had different letters from him since, and last summer I had an opportunity of examining his eye, as he came to town for some days. The pupil was a good deal dilated, still of rather an oval form, with very little power of contraction or dilatation, and that only at its superior part; but, notwithstanding this circumstance, his sight was so perfect, when assisted by a proper glass, as to enable him to read, write, and do all his usual business.

CASE

CASE III.

In the month of October, 1789, James Kelly, a poor man, by trade a hatter, requeſted my aſſiſtance for a complaint in his eyes, which rendered him incapable of earning his bread. He attributed his blindeſs to the influenza, having been ſeverely attacked with that epidemic in the ſummer of 1788; immediately after which he found his ſight gradually diminiſhing till about a month before he applied to me, when he became unable to diſtinguiſh objects. The ſymptoms were the ordinary ones of cataract, and on examination I perceived one in each eye; the left completely opaque, and of a white colour, the other not quite ſo, he being able to ſee bright colours with it.

From the whiteneſs of the left cataract I apprehended it was of a milky nature, being, I ſuppoſed, diſſolved in the capſule; and from ſome irregularity in the colour, at different points of it, I judged the capſule to be opaque. From this latter circumſtance, notwithſtanding the favourable appearance of the eye in other reſpects, I had many doubts of the ſucceſs of an operation; but he entreated me to give him

even the chance that remained, as he could not be worſe than in his preſent ſituation.

After the uſual preparation, I proceeded to extract the left cataract, and having paſſed the knife through one ſide of the cornea, and approached the other, the eye turned towards the internal angle. This obliged me to pierce the oppoſite ſide as quickly as poſſible, which immediately gave me ſuch command, that I turned the eye to the poſition I wiſhed, and finiſhed the ſection of the cornea. The aqueous humour flowed out, and from the extreme irritability of the eye the pupil inſtantly contracted to the ſize of a large pin's head, encloſing the cataract. I turned his back to the light, and, cloſing the eyelids, ſuffered him to reſt for ſome minutes, but the pupil was ſo clearly contracted, that I had much difficulty in introducing the inſtrument recommended by De Wenzel to divide the capſule of the cryſtalline. After waiting, however, ſome minutes longer, the irritation ſubſided in ſome meaſure, and I effected it; the pupil became a little more dilated, and, by cautious preſſure, I extracted a large portion of the cryſtalline in a broken and partly diſſolved ſtate; the remainder of it came away partly by preſſure

preſſure and partly by the aſſiſtance of a ſmall hook.

I now was convinced of what I had before a ſuſpicion, that the capſule was partly opaque; but it ſeemed confined to a ſmall portion of it, at the external part, which left full four-fifths of the pupil perfectly clear. From this circumſtance, and the unavoidable loſs of ſome of the vitreous humour during the operation, I thought it moſt prudent not to attempt to extract the opaque capſule from an eye ſo extremely irritable; I therefore cloſed it, and having bled the patient freely from the arm, laid him in bed in the proper poſition, viz. on the oppoſite ſide to the eye operated on. This is a very neceſſary precaution, as it tends to prevent ſtaphyloma, or any dangerous flow of the vitreous humour.

From the great irritability of this patient's eye, I am perſuaded, that, had I made uſe of a ſpeculum to fix it during the operation, the moſt probable conſequence would have been a fatal diſcharge of the vitreous humour.

On the firſt and ſecond days after the operation he had a ſenſation of flaſhes of light before the eye, but without heat or pain. He took an opiate at night.

On

On the third day, the roller becoming looſe, I removed it: there appeared no inflammation of the eyelids: he could diſtinguiſh through them when I placed my hand between the eye and a candle. The eye was covered as before. From this to the eighth day he continued free from pain, and was allowed a more generous diet.

On the eighth day, having bathed the eyelids with warm water, I opened them. The eye appeared ſomewhat inflamed, but naturally full. The pupil was clear, except a very ſmall portion of it next the external angle of the eye, which was obſtructed by the opacity of the capſule at that part. The ſhape of the pupil was ſomewhat irregular, and larger than natural. He knew his wife's face, and thoſe of ſome friends who were in the chamber. The eye was covered as before.

On the fourteenth day I obſerved a ſubſtance like mucus on the inferior part of the cornea near the cicatrix of the wound. I had ſeen this on the eighth day, but did not then take much notice of it. This day I examined it more attentively, and found it to be a ſubſtance like a very fine membrane in a ſloughy ſtate, taking its riſe from the cicatrix of the cornea. It was removed with a pair of ſmall forceps, and its tena-

city

city was found to be conſiderable: his ſight was immediately improved by this little operation. The eye having watered freely for ſome days before, he had been ordered a ſaturnine collyrium, but, as uſual in theſe caſes, with no effect.

As ſome degree of inflammation was ſtill preſent, which might be increaſed by the application of the inſtrument to remove this opaque ſubſtance, it was thought adviſable to order a bliſter to the back of the patient's neck, which in ſome days had the deſired effect.

On the twenty third day from the operation he could ſee objects very diſtinctly; knew perfectly all his friends with the naked eye; and as he walked through the ſtreets he could readily read the names, &c. of the ſhopkeepers written over their doors.

I intended purchaſing a proper glaſs for this man; but he ſoon relapſed into a habit of drinking ſpirituous liquors, to which he had formerly been much addicted, and knowing that I highly diſapproved of this conduct, he was, I believe, aſhamed to let me ſee him.

I have at different times ſince, and ſo lately as a week ago, endeavoured to find him out, but without ſucceſs: I have learned, however, from his friends that his ſight is ſo good as to enable

enable him to work at his trade without the aſſiſtance of a glaſs, but that he has led, and ſtill leads, a very profligate life.

It may be aſked what was the nature of the ſubſtance encloſed in the cicatrix of the cornea? As it had neither the appearance, nor the conſiſtence of a fragment of the cryſtalline lens, but rather that of a membrane, as already deſcribed, I ſuſpect it to have been a portion of the membrane of the aqueous humour, frequently deſcribed by De Wenzel as forming one ſpecies of ſtaphyloma after this operation; in which caſe it appears like a drop of limpid water reſting on the cicatrix of the cornea; but that it has ſome kind of covering we know from its not being removed by the motion of the eyelids. A caſe of this kind I have ſeen; the little ſac was removed by a ſnip of a pair of ſciſſars, but returned again next day. Its radical cure was effected by the natural motion of the eyelids.

In the preſent caſe, this membrane, inſtead of forming a little hernia containing aqueous humour, protruded between the edges of the divided cornea, and theſe fell into a ſloughy ſtate, giving the appearance already deſcribed.

CASE

CASE IV.

In the month of July, 1790, John Hannan, a poor ſchoolmaſter from Kilkenny, aged forty-three years, applied to me for relief for blindneſs occaſioned by cataracts. Fifteen years before, an oculiſt, in this city, attempted to depreſs that of the left eye, in which he failed, and the man remained blind of it.

The cataract of the right eye had been gradually affected in the uſual manner for near ſix years, and at the time he came under my care all uſeful ſight had been loſt for two years. It was of an iron colour, and from a certain ſtreaked appearance on its ſurface I judged the capſule of the lens to be opaque. In other reſpects the eye looked well; the dilatation and contraction of the pupil were perfect, and I had reaſon to believe the optic nerve to be in a ſound ſtate: I, however, acquainted him with my doubts of ſucceſs from the opacity of the capſule; but his ſituation was ſo miſerably dependent, that he begged I would give him whatever chance remained.

When I undertook this operation I intended to have removed, with a pair of fine forceps, the

the anterior part of the capſule, ſhould it be found in a ſtate of opacity, a thing very practicable in many caſes; but from the circumſtance I am about to mention I was obliged to alter my intentions. My aſſiſtant, Mr. Richards, ſecured the upper eyelid without making any preſſure on the globe: I introduced the knife into the cornea at the uſual place; but ſcarce had I done ſo when the eye (which was extremely irritable) ſuddenly turned in towards the noſe: this obliged me to uſe all poſſible diſpatch in piercing the cornea at the oppoſite ſide, and finiſhing the inciſion, to avoid being engaged in the iris, and which with conſiderable difficulty I effected; for ſo rapid and violent were the motions of the eye, that the blade of the knife, while paſſing through the cornea, was ſo much bent, that on reſuming its ſhape it made a noiſe that could be heard at the fartheſt part of the chamber. The conſequence of all this was, too ſmall an inciſion of the cornea, the great, and, I believe, moſt frequent cauſe of the failure of this operation in the hands of practitioners in general.

The pupil contracted over the cataract, and I had to wait full a quarter of an hour before I could introduce an inſtrument to divide the capſule,

capſule, which appeared very opaque, and gave ſome reſiſtance to the needle; at length, however, it was effected, and by the cautious preſſure of my aſſiſtant I was enabled to ſeize the cataract with a ſmall hook, and extract it ſafely and entirely. It was large, of a brown colour, and hard conſiſtence. The capſule now appeared obſtructing more than half the pupil; but the quantity of vitreous humour loſt during the operation, the extreme irritability of the eye, and, above all, the ſmallneſs of the wound of the cornea, made it impoſſible for me to attempt the extraction of this opaque ſubſtance without incurring the greateſt hazard of deſtroying the eye. Having, therefore, puſhed the capſule as much to one ſide the pupil as I could with a ſmall blunt inſtrument, I cloſed the eye, and truſted to nature for the reſt.

I took ſome blood from his arm, and laid him in bed in the uſual poſition. At night he had an opiate. Next day he was free from all pain or uneaſineſs, feeling nothing more than a degree of warmth in the eye.

On the night of the ſecond day his bandage looſened and came off, and ſo little ſoreneſs had he in the eye, that, forgetting his ſituation, he rubbed and opened it. When I ſaw him next day

day I found the eyelids without inflammation, and curiosity induced me to open them and examine the eye at this early period. The wound of the cornea seemed to be perfectly united, and the eye naturally full; but there appeared to be a good deal of inflammation and intolerance of light; the pupil was almost entirely obstructed by the opaque capsule, and the interstices had a muddy appearance. As the eye watered much from the irritation of the light, I closed it, with little hope indeed of his getting sight.

From this early opening of the eye it was for some succeeding days in a state of considerable irritability, giving some uneasiness, and watering freely, but unattended with pain. I laid a blister on the back of his neck, and kept up a discharge for some time, which had the desired effect.

I did not open the eye again till the fourteenth day. There was still some degree of inflammation and turgescence of the vessels of the tunica conjunctiva; the pupil had some clear points towards the inferior and internal parts; he could distinguish my features tolerably well, the colours of a painted chair, &c. The wound of the cornea was slightly opaque. He had

been

been out of bed every day for a week paſt. His room was darkened.

On the 24th day, his ſight was improving faſt. Though more than 4-5ths of the pupil were obſtructed by the capſule, he could, through the clear points, diſtinguiſh colours accurately; knew his daughter's face, and with the aſſiſtance of a glaſs of conſiderable magnifying powers, he could read very large print. He had that imperfection of viſion, however, which is common after this operation for a ſhort time, viz. of ſeeing a candle and other objects double. For ſome days paſt he had walked out and waſhed the eye with cold water.

At the end of five weeks two of the clear points of the pupil were obſtructed by the capſule becoming opaque. The one next the internal angle of the eye ſtill remained clear, and though it did not exceed in ſize the head of a large pin, yet through it, with the aſſiſtance of a proper glaſs, he could ſee to read print of the ordinary ſize, to know his friends perfectly, and to do all the common offices of life with eaſe. He returned in this ſtate to Kilkenny. I have twice ſeen him in town ſince, and examined the ſtate of his eye. The clear point had increaſed ſomewhat in ſize, and his viſion was conſiderably improved.

From the event of this case we learn how very small a portion of the pupil will admit a sufficient number of the rays of light to afford tolerable vision; but I am aware that many may be of opinion that the involuntary motions of the eye during the operation, and the consequent difficulties, might have been prevented by the use of a proper speculum oculi. To this I can only say, that from my own experience, as well as from that of others, I am inclined to believe that it would not have had that effect; and that when the eye is, either naturally, or from any other causes, in a very irritable state, the use of an instrument of that nature only serves to increase the danger of an operation, as it evidently tends, by its pressure on the vitreous humour, to render the iris more convex, and to throw it more in the way of the knife. But at the same time that it increases the hazard in this particular, it deprives the operator of the only means of obviating it; for it is a curious fact mentioned by De Wenzel, and of the truth of which I am convinced by my own experience, and that of others, that when the knife becomes engaged in the iris, the only safe method of extricating it is by making gentle friction on the cornea with a finger of the hand employed to depress the lower eyelid, by which means the

iris

iris is found to retract ſufficiently to give the operator an opportunity of finiſhing the ſection of the cornea. Now if the hand be employed in holding a ſpeculum, it is evident that this very important aid cannot be obtained. But ſhould even this accident be avoided by the dexterity of the operator, ſtill there will be, from the ſame preſſure, great hazard of a ſudden and deſtructive flow of the vitreous humour as ſoon as the inciſion of the cornea is finiſhed; at leaſt it will require more dexterity to avoid it than falls to the ſhare of operators in general. I am, therefore, of opinion, that, in diſagreeable caſes of this nature, the ſucceſs of the operation muſt always depend chiefly upon the dexterity of the operator, and that the uſe of a ſpeculum will only ſerve to increaſe his embarraſſment and the patient's danger.

Practical Remarks.

Having now finiſhed a faithful, though perhaps tedious, detail of theſe caſes, I ſhall, from them, and ſome others which have fallen under my obſervation, beg leave to ſuggeſt the following practical remarks:

Firſt, That the ſafeſt and beſt method of ſecuring the eye, during the operation, is to have the upper eyelid drawn up by an aſſiſtant, while the operator himſelf depreſſes the lower one,

without making any preſſure whatever on the globe of the eye. In ordinary caſes I have ſhewn that a ſpeculum oculi is at beſt unneceſſary; and in the caſe of an irritable eye I have ſhewn that its uſe would be attended with embarraſſment to the operator and hazard to the patient.

Secondly, That a knife, with the point long and narrow, traverſes the anterior chamber of the eye with more eaſe than that in common uſe, (by which the eye becomes fixed) and from the increaſing breadth of the blade towards the handle the operator is enabled, by ſimply puſhing it forwards, to make a ſection of full one half of the cornea, a leading ſtep in the operation, and which always renders the ſubſequent one of extraction more ſafe and eaſy.

Thirdly, That, after ſuch a ſection of the cornea as is above deſcribed, the various ſedative and other applications commonly made uſe of to the eye, with a view to prevent inflammation, are altogether unneceſſary; and that the adheſion of the eyelids, which often takes place, is moſt eaſily and effectually removed by the ſaliva of the patient applied on the end of his finger, which can be done without removing the bandage, or danger of hurting the eye, as the patient's feelings will teach him to avoid giving pain by any degree of preſſure.

Fourthly,

Fourthly, That the loſs of any of the vitreous humour, during the operation, ſhould, if poſſible, be avoided, as its preſervation haſtens the recovery of viſion, (ſee Caſe I.); but that even a large portion of it may eſcape without material injury. It appears to me that the recovery of viſion is ſlow in proportion to the quantity of this humour that eſcapes, but that the loſs of it has generally the effect of preventing after pain and inflammation.

Fifthly, That the opacity of the capſule of the cryſtalline humour is always to be feared, as leſſening the chance of ſucceſs from operation; yet that even under circumſtances forbidding its removal the patient may be reſtored to ſight, as it appears that a very ſmall portion of the pupil remaining clear is ſufficient for this purpoſe—(ſee Caſe IV.)

Sixthly, That a ſenſation of flaſhes of light coming from the eye the firſt days after the operation, when unattended with pain, is not an unfavourable ſymptom—(ſee Caſes II. and III.)

Seventhly, That a preternatural dilatation, irregularity, and loſs of power of motion in the pupil, after this operation, are no material impediments to viſion—(ſee Caſes II. and III.)

Eighthly, That though a temperate ſeaſon of the year is moſt deſirable for a patient under-

going this operation, yet that with proper precautions, neither the rigours of winter, nor the heats of ſummer, prevent its ſucceſs.

And ninthly, That when the conſtitution in general, and all parts of the eye, except the cryſtalline and its capſule, are in a ſound ſtate, even an advanced age is no bar to the ſucceſs of this operation; but that a very vitiated habit, even in youth, will prevent ſucceſs I know from diſagreeable experience: having a few years ago extracted cataracts from a young woman, who was extremely emaciated from amenorrhœa and other cauſes, the conſequence was, that the wounds of the cornea did not unite for many weeks, and not till after one eye had ſuppurated, though unattended with pain. I was induced to operate in this caſe from the very favourable appearance of the eyes, and as no accident occurred during the operation, and it was not ſucceeded by pain, or other circumſtances marking local injury, I think I may fairly attribute its failure to the badneſs of the patient's habit.

It may not be amiſs here to mention the preſent ſtate of Abigail Cremor's eyes, (the woman whoſe caſe is given in Vol. IX. Part II. of the London Medical Journal, and who had a cataract extracted from one eye, and depreſſed in

the other, in the month of October, 1787.) I have ſeen her very lately, and her eyes and viſion are now in the following ſtate :—The pupil of the couched eye has its ſhape, dilatation, and contraction, perfect : it is, however, ſomewhat ſmaller than natural ; and though there is no apparent impediment to viſion, yet ſhe does not ſee objects ſo diſtinctly with that eye as with the other, in which the pupil is larger than natural, in ſome degree irregular, and without any power of motion, but viſion is as perfect as it is ever found to be after the removal of the cryſtalline from its natural ſituation.

I had long obſerved a circumſtance in this woman's caſe which puzzled me exceedingly; it was, that ſhe could not diſtinguiſh a letter in a book, even when aſſiſted by the beſt glaſſes, though her ſight was ſuch as to enable her, with the naked eye, to ſew and make all her own cloaths, to know the hour by a clock, and, in ſhort, to do moſt of the offices of life with perfect eaſe. I had often expreſſed my ſurpriſe at this peculiarity; but it was not till laſt ſummer that, with much ſeeming reluctance and mortification, ſhe confeſſed that ſhe had never learned to read, and that ſhe was unacquainted even with the letters of the alphabet : thus had I an explanation of a circumſtance which, from

the appearance of this woman's eyes, and her power of vision in other respects, had led me to form various conjectures relative to her peculiarity of vision; but which, from my ignorance of the real cause, appeared altogether inexplicable.

Having in the history of the preceding cases sometimes mentioned the name of De Wenzel, I think it necessary to add, that his method of operating, together with a number of curious and interesting particulars relative to the extraction of the cataract, are to be found in a most excellent practical treatise, entitled *Traité de la Cataracte, avec des Observations*, &c., published by his son at Paris in 1786, in one volume, octavo. His instruments are delineated in a plate at the beginning of the book. A good deal of experience in this branch of surgery had confirmed me in my favourable opinion of that work, and it appeared to me to contain information of such public utility, that I had determined on an English translation of it, with cases and remarks, illustrating the justness of the observations in general; but at the same time pointing out some particulars in which experience had taught me that implicit faith was not to be yielded even to such authority. On making the necessary inquiries previous to this undertaking, I found I had been anticipated in the translation by Mr. Ware, of London, who had already

already made conſiderable progreſs in it; and from the profeſſional character of this gentleman it is not to be doubted that every juſtice will be done both to the Author and the Public.

Dublin,
March 8th, 1791.

V. *Account of an Extra-uterine Conception. Communicated in a Letter to Dr.* Simmons *by Mr.* William Baynham, *Member of the Corporation of Surgeons of London, and Surgeon in Eſſex County in Virginia.*

ABOUT ten years ago Mrs. Cock, the wife of a reſpectable planter in this ſtate, became pregnant a third time, and at the proper time was ſeized with labour pains, which continued for a day or two, and then left her. She remained in a weak and declining ſtate for ſome months after; during which time ſhe was viſited and attended by ſeveral medical practitioners, two of whom declared her diſeaſe to be a dropſy of the uterus. At length, however, ſhe regained her health, fleſh, and ſtrength, and ſuffered only a trifling inconvenience from her increaſed ſize, which was equal, when I firſt ſaw her, to that of a woman in the ſeventh month of pregnancy. In this ſtate I found her ſoon after my return to this my native country; and at my firſt interview with her I told her I was firmly perſuaded that ſhe

ſhe had actually been with child, but that the child had never been in the womb; in which opinion I was more and more confirmed in every ſubſequent converſation with her.

Some months ago, after a ſevere attack of the influenza, which has for the laſt two years raged here with very great, and, during the laſt fall, with fatal violence, the abdominal tumour began to be painful, and was accompanied with a ſlight redneſs and inflammation of the ſkin, near to, and a little on the left of the navel. After attending her for ſome conſiderable time, during which I made one attempt, but failed, to relieve her by extracting the child, I was induced, by circumſtances, to undertake the operation a ſecond time; which I accordingly performed on Saturday laſt.

I made an inciſion in the belly, beginning oppoſite to, and a little on the left of the navel, and carrying it a finger's breadth or two obliquely downwards, and to the right towards the linea alba, I continued it afterwards in a ſtraight direction, cloſe to the left of the linea alba, about half way to the os pubis. Through this I, with ſome difficulty, extracted the child by pieces; from the appearances of which I judge it to have been equal in ſize (when whole) to a full-grown fœtus of nine months.

Some degree of putrefaction had taken place

in

in the child, ſo as to denude the greater part of the bones of the perioſteum and other coverings; but ſome of the ſoft parts ſtill retained their colour and texture, particularly the heart and lungs, which were perfectly freſh and ſound, and are in my poſſeſſion, preſerved in ſpirits.

I could find no remains of a navel ſtring or placenta, although both muſt have exiſted; but they had probably rotted, and come away in the diſcharge of matter which had come on, and continued a few weeks previouſly to the operation, through a ſmall opening that remained after my firſt attempt. Although the fœtus could not have been ſupported without the intervention of a navel ſtring and a vaſcular chorion, yet it will perhaps admit of a doubt whether or not the ſpongy ſubſtance, as in a common placenta, had an exiſtence.

The particulars of the caſe at large I mean to draw up at my leiſure, with the addition of ſome obſervations, which I will tranſmit to you, together with a ſpecimen of the bones. Mean time I flatter myſelf you will not be ſorry at receiving this abridged account of ſo very uncommon a caſe.

I left my patient yeſterday, being the fourth day after the operation, as well as could be expected; and my horſe is now waiting at the door to carry me thirty miles to ſee her again to-day

to-day—which latter circumſtance I offer as an apology for the haſte in which I write; as before my return home the ſhip will have ſailed by which you will receive this letter.

Eſſex County,
Rappahannock River,
Virginia,
January 18, 1791.

VI. *A Caſe of ſpontaneous Evolution of the Fœtus. Communicated in a Letter to Dr.* Simmons, *F. R. S. by Mr.* Richard Simmons, *one of the Surgeons of the Britiſh Lying-in Hoſpital in London.*

EVERY one who is much engaged in the practice of midwifery muſt have experienced the difficulty, and even danger, with which the operation of turning a child is ſometimes attended; and in caſes where the arm preſents, and from the ſtrong action of the uterus, it may be hazardous, or even impoſſible to deliver by the feet, it muſt be a pleaſing circumſtance to know that nature, unaſſiſted, is capable of effecting the delivery by bringing about a ſpontaneous evolution of the fœtus.

This curious and valuable fact, for which we are indebted to Dr. Denman *, is more particularly applicable to thoſe caſes of arm preſenta-

* See London Medical Journal, Vol. V. pages 64 and 301.

tion

tion where the child is known to be dead; because in such cases our sole object must be to bring away the fœtus in such a way as shall be the easiest and safest for the mother; and we shall be more disposed to wait with patience for the spontaneous operations of nature, when we are certain there is no longer any prospect of saving the life of the child.

The number of instances of this spontaneous evolution, hitherto published, being small, and there appearing to be no inconsiderable variety, both as to the length of time and the manner in which the evolution takes place, I am induced to communicate to you the following short account of a case which occurred to me lately in the British Lying-in Hospital, and which fully corroborates the ingenious observations of Dr. Denman on this subject.

Ann Collins, thirty-six years of age, and of a middle stature, was taken in labour of her sixth child about ten o'clock on Tuesday evening, December the 21st, 1790. She had slight pains till about two o'clock the following morning. The labour pains began then to grow stronger, and continued to do so till about four o'clock; when the midwife, upon examination, found that the left arm of the child had made its way into the vagina. I was now sent for, and by the

time

time I reached the patient the arm had advanced as low down as the ſhoulder, and was hanging entirely out of the os externum.

The midwife being unable to give me any account at what time the membranes had broken, I was deſirous, during the interval of the pains, of introducing my hand into the uterus, in order to effect the delivery by turning; but this, from the frequency and violence of the pains, I found impracticable, without uſing more force than I was then willing to do.

In a ſhort time the left breaſt of the child was forced out of the os externum; and as in this caſe nature ſeemed likely to do ſo much, I was now in expectation that a ſpontaneous evolution of the fœtus would take place: and in this I was not deceived, for in about half an hour from the time I came to the patient, and not more than two hours from the firſt appearance of the arm in the vagina, the child was completely turned by the mere action of the uterus, and was expelled as if the breech had originally preſented. The child was rather a large one; the placenta came away very properly; and the woman recovered without any thing particular happening to her.

Newman Street,
March 27, 1791.

VII. *A Case of Petechiæ sine Febre. Communicated in a Letter to Dr.* Simmons *by* Samuel Ferris, *M. D. F. A. S. Physician in London.*

To Dr. Simmons.

Dear Sir,

AGREEABLY to my promise, I communicate to you the history of a case which fell under my observation in January last: a case of *Petechiæ sine Febre.* This is either a disease of so rare occurrence, that but few practitioners have had an opportunity of seeing it; or if many have seen it, but few of the many have given any description of it to the Public. Two or three only of my medical friends know any thing of the complaint from their own experience. From one of them, Mr. Rumsey, a very assiduous and observing practitioner at Amersham in Buckinghamshire, I have received notes of several cases, which occurred to him in practice, in his own neighbourhood. As for myself, I never saw but two instances of it before that, the history of which you now receive, and those I saw at Edinburgh about eight years ago.

Dr.

Dr. Graff publiſhed an Inaugural Diſſertation on this diſeaſe, at Gottingen, in 1775; and he is conſidered as the firſt who wrote expreſſly on the ſubject, although Lazarus Riverius is referred to as having alluded to this diſeaſe in his chapter *de febre peſtilenti* — (ſee "Lazari Riverii praxeos medicæ Lugduni editæ, 1653," p. 348.)

Since the publication of Dr. Graff's Theſis, the hiſtory of a ſimilar caſe has been publiſhed in the Tranſactions of the Medical Society of Copenhagen, and Dr. Duncan, of Edinburgh, has publiſhed ſome account of this diſeaſe in a volume of medical caſes and obſervations; and two years ago Dr. Adair, jun. from having obſerved ſeveral caſes of it, likewiſe in Edinburgh, made it the ſubject of his very ingenious Inaugural Theſis.

Riverius affixed no particular appellation to this diſeaſe to diſtinguiſh it from thoſe petechial complaints which have fever as eſſential to their exiſtence. Dr. Graff diſtinguiſhed it by the name *petechiæ ſine febre*; this name conveys no idea of the effuſion of blood, which, from ſome ſource or other, generally accompanies an appearance of petechiæ without fever, and therefore Dr. Duncan propoſed

to call this diſeaſe *petechianoſos* vel *aimorrhœa*; and in order to connect the idea of both occurrences, Dr. Adair calls it *hæmorrhœa petechialis*: But neither the names propoſed by Dr. Duncan, nor that adopted by Dr. Adair, are expreſſive of the abſence of fever; and I, on that account, prefer the name, under which, Dr. Graff firſt deſcribed the diſeaſe: for the abſence of fever is one of its moſt ſtriking peculiarities.

CASE.

M. C. daughter of J. C. a publican, in Hart-ſtreet, Bloomſbury, was brought to me, January 20th laſt; ſhe was ſeven years old in December, 1790; ſhe had always appeared to be a healthy, and ſhe was always an active child. She had never been ſubject to any particular complaints, nor had ſhe been in the leaſt indiſpoſed for three years prior to the appearance of the diſeaſe which was the occaſion of my ſeeing her: and three years before, ſhe had only a ſlight remittent fever, which the apothecary, who accompanied the child to my houſe, informed me, was not of very long continuance. Her food had ever been as good, and her clothing

and habits ſuch as the children of people in the ſituation of her father and mother are uſually accuſtomed to, and they are reſpectable people, in their line of life.

During the night of the 17th of January laſt, ſome bright red ſpots appeared on her left foot, and on both of her legs: from that night to the 20th, when I firſt ſaw her, many more made their appearance on different parts of her body, gradually increaſing in number from the legs upwards, and on the 20th there were ſeveral on her arms, neck, and face; thoſe on the thighs were the largeſt, and many of them were livid, like bruiſes; ſome likewiſe on the neck and cheek were livid, and there was one larger than a ſhilling on the inſtep of the left leg, livid, hard, and ſomewhat prominent, as if blood had been effuſed into the cellular membrane, and had coagulated there.

On the morning of the 18th, her mother, when ſhe went to the child's bedſide, obſerved that her noſe had bled a little during the night, and that ſome dark-coloured clotted blood came from her mouth. Her mother then firſt noticed the ſpots on her legs. During the night of the 18th, when the child fell aſleep, her mother ſaw her noſe bleed, and, as it appeared to her,

more than it had bled the night before, and ſome blood, partly clotted, and partly fluid, came likewiſe from her mouth, of a dark colour. The child herſelf did not ſeem reſtleſs; but her mother, from apprehenſion, leſt the blood ſhould ſuffocate her, awakened her repeatedly, and immediately as ſhe was awakened, the blood ceaſed to flow.

No hæmorrhage occurred through the day of the 18th nor of the 19th, nor in the night of the 19th did the noſe bleed, as it had done before; but ſo ſoon as ſhe was aſleep, blood began to flow, and ſome clots likewiſe came from the mouth, as in the preceding night, but in greater quantity, and always ſtopping immediately, whenever ſhe was awakened. She had a very trifling cough on the morning of the 20th, but had not any before, nor even the leaſt ſenſible indiſpoſition of any kind prior to the deſcribed affections obſerved on the morning of the 18th. Her appetite had been uniformly good, and her bowels regular, and were ſo on the 20th; nor had her water been obſerved to change in the leaſt from its uſual appearance. She had ſlept well, had been conſcious of no increaſe of heat, and her ſkin had been, and was, when I ſaw her, ſoft and natural to the touch.

On the 20th, when she was brought to me for my advice, she seemed perfectly alert, not in the least debilitated; her pulse was calm and regular, and by no means weak; but her tongue was a very little white, and, as her mother informed me, it had been more so during the night, and in the morning before I saw her. She was not in the least unusually thirsty; her fauces were tumefied, and the swoln amygdalæ were livid, and seemingly ruptured, for there was the appearance of coagulated blood, of a dark colour, hanging about the surface of them, as on the surface of an ill-conditioned ulcer; her breath was excessively offensive, but was never noticed to have been so before the morning of the 18th. Her gums were clean and sound. She felt no uneasiness from swallowing, nor did she complain of the least pain in any part of her body.

My prescription on the 20th was the following:

℞ Decocti Corticis Peruviani ℥j
Pulveris ejusdem, gran. x.
Syrupi Papaveris albi,
Tincturæ Radicis Serpentariæ Virginiensis,
ana ʒj.

Misce fiat haustus quater inter horas xxiv. sumendus.——Let her eat oranges *ad libitum*.

The

The notes which I took of her ſituation, and the directions I gave afterwards, were as follow:

January 21ſt. The ſpots are nearly as yeſterday, but ſome are now obſervable on the edge of the tongue, on the gums, and one on the *tunica ſclerotica* of the right eye. She had no bleeding from the noſe, and leſs from the mouth laſt night; her appetite is not ſo good as yeſterday; ſhe complains of pain in the right hypogaſtric region. She has ſtill a little cough; her urine of laſt night was whitiſh, that of this morning is of a deep red colour, as if ſtrongly tinged with blood. Her pulſe is quicker and rather lower; her tongue ſomewhat white.

The draughts and oranges to be continued, and let her drink wine and water as her common beverage.

22. She ſlept well laſt night, and but little blood came from her mouth. Her noſe did not bleed; her appetite is not ſo good; the ſpots ſeem to diminiſh; the pain in the hypogaſtric region continues; her urine is ſtill red, but her mother ſays it is of a lighter tinge. Her pulſe is not very quick, but low; her tongue as before.

Let ten drops of the acid elixir of vitriol be added to each draught.

23d. The ſymptoms are nearly as yeſterday; more *vibices* appear on the thighs, legs, and other parts of the body; and very ſlight preſſure on the arms occaſions them. No blood flowed from the mouth laſt night; her urine in conſiderable quantity, and a little tinged with blood. Her tongue is whitiſh; ſhe had two ſtools yeſterday.—The ſame medicines to be continued.

24. The ſmall petechial ſpots are diminiſhed; and ſeveral are entirely gone; the *vibices* remain as yeſterday; the urine of laſt night is of a bright florid blood colour; that of this morning darker, with light red ſediment, but nothing like coagulum, nor has ſhe made ſo much water during the laſt twenty-four hours, as ſhe made in the twenty-four preceding. She ſlept well, and but very little blood came from the mouth; the fauces are ſtill tumefied, but the amygdalæ are leſs livid. The pain of the hypogaſtric region continues; ſhe ſometimes refers it to the ſeat of the right kidney. She had no motion yeſterday; her pulſe is quick and low; her tongue a little furred, but moiſt; ſhe was ſomewhat more than uſually thirſty yeſterday, but was not ſenſible of the leaſt extraordinary heat or dryneſs of the ſkin.

Five grains of the Powder of Bark to be added to each draught.

25th. She ſlept well laſt night; no blood has flowed from the mouth; her breath is leſs offenſive; the petechial ſpots are on the decline, but the *vibices* remain on the legs and arms; her urine has been in leſs quantity than before, and leſs tinged with blood. She had one motion yeſterday; her pulſe is nearly as yeſterday; her tongue and mouth clean; her appetite mended, and ſhe is in good ſpirits.

27th. Every ſymptom is abating; her urine is returning to its natural appearance.

29th. She is ſtill better than on the 27th; the petechial ſpots are gone; her urine is nearly natural.

31ſt. She ſeems in every reſpect well. The urine of the 29th, has depoſited a little ſediment, with ſome few particles of the colour of blood. Yeſterday and to-day her urine has been natural; but there are ſtill very ſlight traces of *vibices* remaining; her appetite and ſpirits are exceedingly good; her throat is well; her breath not the leaſt offenſive; and her bowels are regular.

Her draughts to be continued morning and evening for a few days.

There is nothing more uſual than for phyſicians to attempt to explain the ſource and cauſes of the different phenomena of diſeaſes. But the theoretical opinions of different phyſicians, concerning theſe circumſtances, are frequently ſo various and contradictory, that we need require no clearer elucidation to prove the general inutility of ſuch attempts.

Under ſuch a conviction, it would be inconſiſtent in me to enter into a long diſcuſſion of the *Ratio Symptomatum* of *Petechiæ ſine Febre.*

It can ſcarcely be denied that the blood circulating through the veſſels of the living body, is thinner in its texture at one time than at another. Riverius, Dr. Duncan, and others, have conſidered a preternatural thinneſs of the blood as the immediate ſource of the *petechiæ* and *vibices* apparent in the diſeaſe above deſcribed. It has been ſuppoſed alſo by ſome phyſiologiſts that it is poſſible for ſuch a partial laxity of the vaſcular ſyſtem to exiſt, as to occaſion an eaſy rupture of the finer veſſels, from any very ſlightly applied force, or to admit of the blood's paſſage through parts not permeable by the blood when ſuch parts are in their natural ſtate, and that without any perceptible diminution of vital energy, or at leaſt ſufficient to interrupt the full exertion of muſ-

cular action. Such a ſtate of laxity has been likewiſe conſidered as the ſource of the *petechiæ* and *vibices* in the diſeaſe juſt now deſcribed; and the remarkable circumſtance of the blood ceaſing to flow, as mentioned in the above caſe, when the child was awakened, is a ſtrong preſumptive proof of the juſtneſs of ſuch an inference. For as there is leſs occaſion for muſcular exertion, during ſleep, there is conſequently leſs energy excited, and all the aſſumed conſequences of ſuch a ſuppoſed laxity might be expected to happen, whenever the vital energy ſhould diminiſh as it does in ſleep, and to be ſubverted whenever that energy ſhould be rouſed for the due performance of muſcular motion.

But perhaps the fact is, that both the aſcribed cauſes of thinneſs of blood, and partial laxity of veſſels, may aſſiſt in the production of *petechiæ ſine febre*; a diſeaſe ſeemingly very much allied in its nature to the true ſcurvy.

I have the honour to be, &c,

SAMUEL FERRIS.

John Street, Bedford Row,
April 6, 1791.

VIII.

VIII. *Inſtance of a Diſeaſe, to which* Sauvages *has given the Name of Meteoriſmus Ventriculi; with Remarks. By* Robert Graves, *M. D. Phyſician at Sherborne, in Dorſetſhire; and Extra Licentiate of the College of Phyſicians, London.*

ON the 2d of February 1791, Ann Hunt, who had juſt entered into her fifteenth year, was affected with an uncommon, large, hard, uniform, prominent tumour or ſwelling in the epigaſtric region, extending from the ſternum to ſome diſtance below the umbilicus. It was of a circular form, accompanied with very little or no pain, excepting upon its being preſſed; and even in that caſe, the pain excited was but inconſiderable. She perceived ſome ſlight difficulty of breathing, upon uſing any bodily exertion, particularly that of walking; ſhe had much thirſt, yet her appetite for food remained tolerably good, no way depraved, and her belly regular, with but little apparent loſs of fleſh. No obſervable change in her countenance could be diſcovered, except that it had become ſomewhat of a paler colour than uſual.

The appearance of this extraordinary ſwelling was firſt perceived in the region of the ſtomach, ſome

ſome time in the month of June 1790, of a ſize not larger than that of a hen's egg. From this time it continued gradually to increaſe, till about the commencement of the enſuing Auguſt, when the enlargement which it had received in the courſe of this interval was ſuch, that the whole ſpace between the ſternum and umbilicus became completely occupied by it. Afterwards it remained with little variation to the period of its removal. Shortly after the appearance of this ſwelling, ſome medicines were given her with a view to its diſcuſſion; but from their ſeeming inefficacy, joined to her parents' ſlender ability to procure them, on account of their expence, they were ſoon diſcontinued.

As I was ſtrongly perſuaded, from the age of the patient, and other circumſtances, accompanying the caſe, that it was to be conſidered as falling under the denomination of *meteoriſmus*, as deſcribed by Sauvages, I reſolved to ſupply her with ſuch medicines as the nature of the caſe ſeemed to me to indicate, in order to learn with greater certainty from the event, whether I was right in the judgement I had thus formed of it. Accordingly on the 2d of February, when ſhe came to me, I gave her ſome powders, conſiſting of about eighteen grains of prepared ſteel,

and

nd directed one of them to be taken twice a day. She had likewiſe a purgative medicine, which was ordered to be taken early the next morning, compoſed of a ſcruple of rhubarb, and of about three grains of calomel. This powder operated briſkly and well; her ſtools were of a blackiſh colour, and ſlightly offenſive.

From this operation the ſize of the tumour ſeemed no way diminiſhed or affected. But after a continuance of the chalybeate powders only for the ſhort ſpace of three or four days, her ſwelling was found leſſened to a conſiderable degree; and in a day or two afterwards was totally removed, ſo that the parts, which before had been ſo exceedingly hard and protuberant, became enabled to reſume their natural form, ſituation, and ſoftneſs. It is now upwards of two months ſince ſhe was happily relieved; nor has ſhe experienced, as yet, the ſmalleſt alarm from any ſign or appearance which the complaint has at all ſhewn of returning again. It may not be improper here to obſerve that, though the quantity of eighteen grains of chalybs makes a pretty large doſe to begin with, and would in moſt tender habits be productive of ſome degree of ſickneſs, it had no ſuch ſtimulant effect in the caſe before us. The only ſenſible

operation

operation attendant on its exhibition was, its occaſioning violent and frequent eructations of wind; and it is ſomewhat remarkable, that this effect took place very ſoon after the firſt doſe of it had been ſwallowed, and before the period at which the ſecond was taken.

That the caſe above mentioned affords a perfect, though uncommon example of the *meteoriſmus ventriculi*, as deſcribed by Sauvages, the ſymptoms accompanying it, together with the means employed in its cure, bear ample and unequivocal evidence. Although this is a diſeaſe, which has been ſaid by ſome authors not to be of infrequent appearance in chlorotic females, and others labouring under a ſuppreſſion of the menſes, yet it is preſumed that the preſent inſtance, on account of the peculiarities diſplayed by it, cannot be deemed altogether unworthy of regard. The ſlow and gradual manner in which the ſwelling acquired its increaſe of bulk; the enormous and extenſive ſize it attained; its long continuance afterwards without any very obſervable change; and laſtly its yielding ſo ſpeedily to the remedies made uſe of, are all of them circumſtances that may render it perhaps highly acceptable to the curious and intelligent reader.

Of

Of the ſeveral particulars here mentioned the two firſt are certainly of very rare occurrence; ſeldom to be obſerved in caſes of a like nature. Whether in the ſtomach or inteſtines, when any ſwelling ariſes ſolely in conſequence of a collection of air, its riſe and progreſs are for the moſt part ſudden, and as it were inſtantaneous; and there are but few examples of its appearing firſt of a diminutive ſize, and then receiving a ſlow and gradual enlargement for any long continued portion of time. It is from a knowledge of this and other well-aſcertained facts, that we are enabled to diſtinguiſh, with ſufficient accuracy, between dropſical ſwellings and others, of the abdomen, that have nothing but an accumulation of confined air for the immediate cauſe of their diſtention. As to the enormous ſize the ſwelling exhibited, I believe it may be ſafely aſſerted, that ſuch another inſtance has ſcarce ever fallen within the eye and obſervation of the oldeſt and moſt experienced medical practitioners. In general the ſwelling in theſe caſes amounts to little more than to fill up the hollow or depreſſion between the ſternum and the umbilicus, obſervable in thoſe who are altogether exempt from any diſeaſe of

thoſe

thoſe parts; "ita ut nulla ſit cavitas ab ſterno ad umbilicum qualis in ſanis eſt *."

The late Dr. Cullen, who has ſo deſervedly acquired the thanks and praiſes of all thoſe that are engaged in medical purſuits, for the many important ſervices which have been rendered by him in almoſt every branch of our ſcience, comprehends this and the three other remaining ſpecies of the genus, meteoriſmus, of Sauvages, under the general title of Tympanites. Though there are undoubtedly obvious advantages reſulting from his careful and judicious reduction of the diſeaſes to which mankind is liable, to a leſs number than what had been before, by rendering the ſtudy and knowledge of them more eaſy and expeditious; yet it is doubtful, whether in conſequence thereof, ſome ambiguity alſo be not incurred often in practice. No one from a peruſal of the account which Dr. Cullen has given us of tympanic affections, would have ſuppoſed without the aid of ſome additional information, that the above caſe ought to have been referred to this head of diſeaſes. It is much more probable that its cauſe, under ſuch circumſtances, would have been attributed to ſome morbid obſtruction and enlarge-

* Sauvages Noſol. method.

ment

ment of the liver, or of ſome other adjoining viſcus contained within the cavity of the abdomen.

From the event of the foregoing caſe we have likewiſe an excellent example of the ſuperior power of ſteel as a tonic medicine; ſince the generation of the diſtending air cannot but be ultimately reſolved into a laxity of the fibres of the ſtomach. In caſes even where the complaint is confined ſolely to the inteſtines, its uſe ſeems from hence to be particularly pointed out. The flatulent nature of theſe caſes has alſo led to the employment of medicines of the carminative claſs; but though the milder kinds may be adminiſtered without any ſuſpicion of danger, their poſſeſſing any real efficacy is extremely doubtful, and particularly where the inteſtinal canal becomes the ſeat of the diſeaſe.

IX. *Caſe of a Catheter, left in the Bladder, in drawing off the Urine, for a retroverſion of the Uterus. By Mr.* Edward Ford, *Surgeon of the Weſtminſter General Diſpenſary.*

MARY WILDING, a thin delicate woman, about twenty-five years of age, was admitted in January laſt, as a patient at the Weſtminſter General Diſpenſary. She complained

plained of a painful and involuntary diſcharge of urine, mixed with blood and matter, from the urethra; and alſo of a diſcharge of purulent urine, which was continually flowing from a fiſtulous ſore, ſituated in the buttock, near the middle of the glutæus muſcle. She was in a weak and emaciated ſtate, and had been confined to her bed for ſeveral months; every attempt to move from thence being attended with moſt ſevere pains, both in the neck of the bladder, and at the fiſtulous wound in the nates.

Upon introducing a ſound into the bladder, an extraneous ſubſtance was eaſily felt within its cavity; and from its hardneſs, I judged that it might be a calculous concretion. At the patient's deſire, I then proceeded to examine the fiſtulous ſore on the buttock, and ſhe told me there was a looſe bit of bone in the wound, which frequently made its way outwards beyond the ſkin, but as often ſeemed to be retracted with conſiderable force. I found by examining it with the probe that it lay looſe in the ſinus, and I endeavoured to remove it with the forceps, gradually drawing it outwards. This proceſs was not attended with much pain; but when the extraneous ſubſtance was brought forward about half an inch beyond the integuments, a

further removal of it ſeemed impracticable, as it was ſtrongly held back by the contraction of the muſcles. Whilſt it was retained externally by the forceps, I viewed it cloſely to aſcertain whether it was an exfoliation of carious bone, or a calculous concretion that had made its way outwards from the bladder, but was much aſtoniſhed to find that the ſubſtance protruded from the wound, was evidently the bulbous end of a ſilver catheter.

This diſcovery inſtantly induced me to ſuſpend any further operation, as it was clear that an attempt to remove the catheter by extracting it forcibly through the wound, muſt occaſion a conſiderable laceration of the fundus of the bladder; and I was anxious to collect from the patient, ſuch circumſtances, as might explain her unfortunate ſituation. She profeſſed herſelf totally ignorant by what means the catheter had been lodged in her bladder, and could with difficulty believe the information I gave her. The narrative ſhe furniſhed me with was, that ſhe had been brought to bed four months; that in the third month of her laſt pregnancy, ſhe had been ſeized with a difficulty of voiding her urine, which had been ſeveral times drawn off by means of a catheter; that ſhe had experienced great relief from this operation, but that

the laſt time it was performed ſhe had felt great pain, and had ever ſince been unable to remove from her bed without great diſtreſs; that ſhe had been ſafely delivered at the expiration of the ninth month; and that ſhe had ſince ſuckled her infant, though in the moſt wretched and debilitated ſtate. It was obvious from this account, that the catheter had eſcaped from the hands of the operator the laſt time the urine had been drawn off; that it had ſlipped into the bladder, and had been ſuffered to remain there; and that the only method of relieving her was to extract it through the meatus urinarius.

From the weak ſtate in which ſhe lay, exhauſted by ſuckling her infant, by pain, and by the diſcharge from the wound, I declined performing the operation till her health ſhould be a little invigorated by weaning the child, and by a more nouriſhing diet. When this was accompliſhed, I was favoured with the aſſiſtance of Dr. Jackſon, Dr. Bland, and Dr. Combe, all of whom were anxious to ſee ſo ſingular a caſe.

The patient was laid upon a table and ſecured in the manner uſually adopted in the operation of Lithotomy. The urethra was dilated by the blunt gorget introduced upon a female ſtaff, and the catheter was then attempted to be taken

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out by the forceps. This part of the operation was attended with much difficulty, as the catheter lay tranſverſely in the bladder, the handle of it reſting on the arch of the pubis, and its other extremity on the crura iſchii. It was diſlodged from its ſituation by drawing the blunt end outwards through the poſterior wound, ſo that the handle of the inſtrument being detached from the pubes, was more eaſily brought forward through the opening in the urethra, and extracted. The catheter, which is now in my poſſeſſion, was found covered with a ſlight incruſtration, as repreſented in the annexed drawing *. The operation was finiſhed by extracting a few ſmall calculi from the bladder. The patient was then put to bed, and the ſame regimen purſued as after cutting for the ſtone. A ſlight fever came on, but was apparently more owing to the ſtate of her breaſts, as ſhe had juſt weaned her child, than to the operation. The fiſtulous opening on the buttock healed in a few days, the urine paſſing entirely through the natural paſſage; and in one month ſhe was perfectly well. She now retains her urine, and ſuffers no inconvenience from this extraordinary calamity.

The foregoing caſe is, I believe, un-

* See plate I., fig. 1.

precedented

Fig: 2.

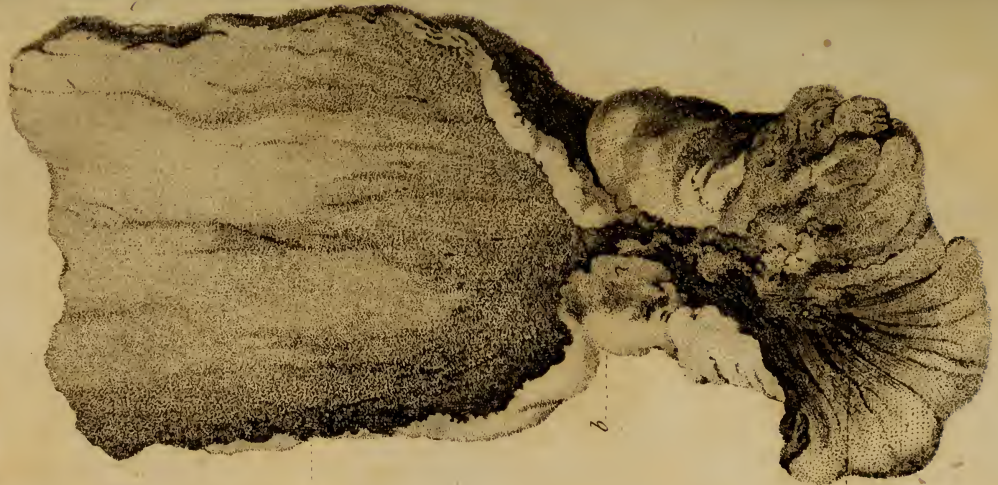

Fig. 1.

precedented in medical hiſtory. It affords a ſingular example of an accident occurring from an operation in ſurgery which has uſually been deemed eaſy to perform, and free from hazard. The natural ſtructure and ſituation of the female urethra warrants the general opinion of the ſafety of this operation; but when an alteration takes place in theſe parts, either from pregnancy or other cauſes, the operation of drawing off the urine may become liable to difficulty.

In caſes of retroverted uterus, we find, by the teſtimony of Dr. Hunter, and other practitioners, that this operation is not always to be done with facility, and that in ſome caſes it has been impracticable. The poor woman who is the ſubject of this paper had been liable to a retroverſion of the womb, both in this and in a former pregnancy. Her urine had been drawn off a few days before this accident by a man-midwife of eminence; but being ſuddenly taken ill, ſhe applied to a perſon in her neighbourhood, from whom this accident happened. His buſineſs obliging him inſtantly to leave London, he heard no more of his patient, and imagined, I ſuppoſe, that the catheter had been expelled by the efforts of the bladder.

Golden Square,
May 16, 1791.

X. *Case of an Imperforate Rectum. By the same.*

MARCH 6th, 1791, I was desired to see a male infant, two days old, who was supposed to have an imperforate rectum. He appeared to be a strong healthy child, well formed in every other respect, had taken nourishment the day before, and as he exhibited externally no marks of mal-conformation, when examined at his birth, it was not supposed that he laboured under this defect till it was found that no evacuation had taken place through the intestines, that he rejected his food, and vomited up every thing he had taken.

When I saw the child he was continually vomiting; the matter thrown up was of a dark yellow colour, and fœtid, and the abdomen was tense and swelled: in other respects he looked healthy, had voided his urine properly, and the anus was naturally formed as far as regarded its external appearance.

I endeavoured to introduce my little finger through the sphincter ani into the rectum, but found an uncommon resistance in the first attempt, the parts not admitting of being dilated as usual; and when this difficulty was with some force

force overcome, at the diſtance of an inch from the external parts, there was an obſtruction to be felt, which reſiſted every effort I made to penetrate it, firſt with the nail of my finger, and afterwards with the blunt end of a probe.

The firſt conſideration which offered to my mind, was to perforate the obſtruction with a ſmall trocar; and in order to do this as ſafely as poſſible, a ſmall catheter was introduced through the urethra into the bladder, which ſerved as a direction to avoid wounding thoſe parts in the operation. The canula of the trocar was then introduced into the anus, under my finger, which defended the urethra, and was fixed as well as I could againſt the obſtructed part of the canal.

The ſtilet was then carried up through the canula, and puſhed through the obſtruction in a direction rather backwards towards the os ſacrum. On withdrawing the ſtilet it was followed by a diſcharge of fæces, through the canula, which continued for an hour ſo as to form rather a copious ſtool. Upon taking out the canula, a bougie was attempted to be introduced through the artificial opening, but without effect.

The child was now left an hour, and on my return I found his belly more tenſe, and that his vomiting continued. I therefore directed ſeveral clyſters of oil and water to be thrown up by means of a ſmall pipe which was fortunately conveyed through the artificial opening into the gut. Theſe clyſters brought off a conſiderable quantity of fæces, but did not ſeem thoroughly to empty the inteſtinal canal; ſo that I deemed it expedient to attempt an enlargement of the opening, by means of the point of a blunt gorget carried up in the groove of a common director. A farther diſcharge of fæces enſued; and the child was then put into a warm bath, and caſtor oil was afterwards adminiſtered by the mouth. Nothwithſtanding theſe remedies, the vomiting continued, the child became convulſed, and died in the courſe of the following night.

Upon opening the body the next morning, I found marks of conſiderable inflammation in the inteſtines, principally in the larger ones, which were inflated to a great degree. There was no obſtruction, however, to be found in any part of the inteſtinal canal except that in the rectum.

The drawing which accompanies this paper will ſhow the manner in which the inteſtine terminated

terminated in a blind pouch, at the diſtance of an inch from the anus, in the hollow of the os ſacrum*. The ſpace between the inteſtine and the anus was lined with an inelaſtic ligamentous ſubſtance, which would probably have produced much inconvenience to the patient in retaining his ſtools, had the operation performed protracted his exiſtence.

Golden Square,
May 20, 1791.

XI. *Facts relative to Pemphigus. Communicated in a Letter to Dr.* Simmons *by Mr.* R. B. Blagden, *Surgeon at Petworth in Suſſex.*

I WAS, in January, 1790, deſired to ſee a girl, two years and a half old, who had been obſerved to droop the preceding day. The child looked heavy, and was feveriſh. A neutral mixture with tartariſed antimonial wine was directed for her. The next day the child was more feveriſh, and had ſlight delirium: an enema was then injected, and a bliſter put be-

* See Plate I. fig. 2, in which *a* refers to the inteſtine, *b* to the ligamentous ſubſtance above deſcribed, and *c* to the anus.

tween

tween the ſhoulders. Late in the evening of that day puſtules were obſerved on the waiſt, and before the morning on the other parts of the body, and on the extremities, but chiefly on the forehead and ſcalp. Within three days the puſtules became complete little bladders, being grown turgid with a yellowiſh fluid.

The general ſize of the veſicles was that of an almond, but the ſize of thoſe on the forehead and waiſt approached nearly to that of a nutmeg.

The larger ones were pierced, the ſmaller ones were ſuffered to burſt of themſelves, and not a veſicle filled again.

The unguentum ceræ was made uſe of as dreſſing. The veſicles on the extremities and on the head were healed in about ten days. It was very evident that the child ſuffered extremely from the ſoreneſs of thoſe on the waiſt, which were not completely healed in leſs than two months. The veſtiges of five of the largeſt of theſe, and of two on the forehead, will ever remain.

All the hair, which grew underneath the veſicles on the ſcalp, came off with the plaſters.

Many very minute veſicles were obſerved in the mouth, and the child ſhowed a repugnance

to

to ſwallow. As the fever and delirium went off on the appearance of the eruption, the medicine was laid aſide. No freſh puſtule appeared after the fourth day.

Five days after the appearance of the eruption on this child, an infant, fourteen weeks old, belonging to the ſame parents, grew feveriſh, and, within the next three days, had an eruption exactly reſembling the above, except in the ſize of the veſicles, which, in this caſe, were no larger than peaſe; they burſt, and the parts were well in about a week.

This child was not ill enough to require any medicine internally.

And now may I be permitted to draw the following concluſions: ——

That the diſeaſe is contagious;

That new veſicles do not, in every caſe, ariſe after the end of the fourth day;

That the fluid they contain does not, even in every caſe of pemphigus ſimplex, appear to be of a bland nature; and

That, in ſome inſtances, no apparent abſorption of it takes place?

Petworth,
May 5, 1795.

XII. *Ac-*

XII. *Account of a Fact relative to Menſtruation, not hitherto deſcribed. Communicated in a Letter to Dr.* Simmons *by* Thomas Denman, *M. D. Licentiate in Midwifery of the Royal College of Phyſicians, London.*

To Dr. SIMMONS.

DEAR SIR,

ALL the common circumſtances attending menſtruation have been well deſcribed by various authors; but having frequently ſeen a ſubſtance expelled with the menſtrual diſcharge, which had eſcaped obſervation, I beg leave, by your favour, to give a ſhort account of it.

In the examination of that diſcharge, for the purpoſe of inveſtigating the ſtate of the uterus, a membranous ſubſtance had been obſerved, which paſſed, without any particular notice, as the token of an early conception, or as the caſual form of coagulated blood. Examining this ſubſtance with greater attention, I conſtantly found that one ſurface had a flocky appearance,

appearance, and the other a perfectly ſmooth one; that it had, in all reſpects, the reſemblance of that membrane which Ruyſch had called the *villous*, and which the late Dr. Hunter, ſpeaking of abortions, had deſcribed with great preciſion, and called the *decidua*. To put the matter out of doubt, about two years ago I requeſted the favour of Dr. Baillie to examine ſome portions of it, and he agreed with me in thinking it ſimilar to the *decidua*.

Having never obſerved this membrane diſcharged by unmarried women, a doubt aroſe whether it was not really a conſequence of an early conception; but I have the moſt undoubted proofs that it may be formed without connubial communication, and that the uterus, in ſome women, has the property of forming it in the interval between, or at each period of the menſtrual diſcharges. It ſeems particularly neceſſary to eſtabliſh this fact, as the appearance of the membrane might give riſe to erroneous opinions and unjuſt reflections.

In every caſe, in which this membrane has been obſerved, the women have menſtruated with pain, and the diſcharge has flowed ſlowly, and apparently with difficulty, till the membrane

brane has come away, which in ſome caſes has been in ſmall flakes, and in others in pieces equal to half the extent of the cavity of the uterus, of which they retained the ſhape. But whether this membrane be expelled in every caſe of painful menſtruation, my experience does not enable me to decide.

No woman, in the habit of expelling this membrane, has been known to conceive; and this obſervation leads me to ſpeak of the treatment which has been adviſed for making ſuch a change in the ſtate of the uterus, that it ſhould be diveſted of the property of forming this membrane at the time of menſtruation.

There does not appear to be any external peculiarity of conſtitution, or diſpoſition to any other complaint in thoſe who have been liable to the formation of this membrane, which ſeems to be a proper office performed at an improper time. Recourſe has been generally had to mercurial medicines in one form or other, ſometimes as active purges, and ſometimes carried ſo far as to occaſion a ſlight ſalivation: but the ſafeſt method, and, as far as I know, the moſt effectual, is, to give ſmall doſes of calomel every night at bed time for ſeveral weeks together,

and

and twice, in the courſe of the day, a large doſe of the volatile tincture of bark.

I remain, dear SIR,

Your very humble Servant,

THOMAS DENMAN.

Old Burlington Street,
May 5, 1791.

XIII. *Practical Obſervations on the Treatment and Cauſes of the Dropſy of the Brain. By* Thomas Percival, *M. D. F. R. S. and S. A. Lond.; F. R. S. and R. M. S. Edinb.; Preſident of the Literary and Philoſophical Society of Mancheſter; Member of the Royal Medical Society at Paris; of the Royal Society of Agriculture at Lyons; of the Medical Society of Aix in Provence; of the Philoſophical Society at Philadelphia, and of the American Academy of Arts and Sciences, &c.*

THE ſafety and efficacy of mercury in the hydrocephalus internus has been fully eſtabliſhed, by the experience of various medical practitioners, in this and other countries ſince

ſince the year 1777, when the public was firſt informed of its ſucceſsful adminiſtration *; and though it is far from being a certain remedy, yet the almoſt conſtant fatality of this diſorder, under every antecedent method of cure, renders it a valuable and important acquiſition to the healing art. But in the recital of one of the earlieſt caſes in which it was employed I have perhaps too much diſparaged former modes of treatment, and too haſtily declared my ſole and excluſive truſt in the internal and external uſe of mercury; for there are ſeveral medicinal aids, which, however inſufficient in themſelves to conquer this formidable diſeaſe, may contribute to ſo happy an event, by mitigating pain and ſpaſm, by promoting abſorption, and by increaſing the ſerous diſcharges of the body. With theſe views I now generally preſcribe either opium, muſk, ſalt of hartſhorn, flowers of zinc, ſquills, or bliſters, in conjunction with the mercurial courſe, with which they perfectly coincide. The preference to be given to one or other of theſe remedies the circumſtances of

* See Medical and Philoſ. Commentaries, Vol. V. p. 174, Vol. VI. p. 219; Medical Obſervations and Inquiries, Vol. VI. art. vi. by Dr. Dobſon, art. viii. by Dr. Haygarth.

the

the caſe will ſufficiently indicate; and it would be a falſe and unjuſtifiable ſacrifice to ſimplicity of practice not to avail ourſelves, in the treatment of ſo dreadful a malady, of ſubordinate means, which may prove auxiliary, and cannot counteract the ſalutary powers of what merits our chief reliance. In purſuing this enlarged plan, I have experienced fewer diſappointments than formerly, and have derived ſatisfaction under it, from the conſciouſneſs of no neglect or omiſſion. When the pains are very acute, opiates, in large and repeated doſes, are eſſential to the cure; but if the patient be in a ſtate of *coma*, they are obviouſly improper, and muſk, combined with ſalt of hartſhorn, ſhould be freely adminiſtered. Under every circumſtance of the diſeaſe bliſters are expedient; and the application of them ſhould be renewed as often as can be done without exciting ſtrangury. I have tried fox glove in but few caſes of hydrocephalus. In one, which was of long continuance, and terminated fatally, this remedy produced extreme debility, various diſtreſſing nervous ſymptoms, and was attended with no beneficial operation. Mercurials, and other active means, had alſo been tried in vain; and all hopes of relief being given up, the

child was ſent into the country, where, though totally blind, he was not without enjoyment; and retained his faculties in a perfect ſtate till death, notwithſtanding it was found, on opening the head, that the right hemiſphere of the brain was entirely diſſolved, the corpora ſtriata deſtroyed, and the left lateral ventricle contained twelve ounces of water. In another caſe, which lately occurred, fox glove was adminiſtered, with opium and calomel, according to the following formula:

℞. Pulv. digital. purpur.
Opii colati,
Calomel. pp^{ti}, aa g^{r} j. M.
F. Pilulæ ij. 4^{tis} horis ſumendæ.

After the ſecond doſe of theſe pills, the patient, who was about twelve years of age, fell into a ſound ſleep, which continued ſix or eight hours. She awaked, in a great meaſure, free from pain, highly refreſhed, and capable of viewing the light. Her head had ſweated profuſely, a large flow of urine had taken place, and from this period the commencement of recovery was clearly to be dated. But I am inclined to aſcribe the ſalutary change rather to the

the opium than to the fox glove, and to the opium only as auxiliary to the powerful action of the mercury, which had been previouſly and very largely adminiſtered in the way of unction; and I am ſtrengthened in this concluſion by the antecedent effects of mercury in the ſame patient, under the direction of Mr. Henry, before I was conſulted; for conſiderable relief had been obtained by it, though afterwards ſhe ſuffered a relapſe; and the courſe was renewed by my advice, with the additional remedies above mentioned.

I have examined various hiſtories of hydrocephalus, related in different medical journals, ſince the adoption of mercury in the treatment of it, and of twenty-ſix caſes, noted indiſcriminately in the courſe of my inquiries, I find that eleven recovered, and fifteen died. Of the recoveries, mercury was employed in ſeven of the inſtances, and other remedies in the remaining four. Of the deaths, mercurials were employed in four caſes, and other remedies in eleven. Theſe facts, drawn from authentic records *, afford a ſtriking proof of the ſuperior advan-

* Medical Obſervations and Inquiries; Dr. Duncan's Medical Commentaries; London Medical Journal; Memoirs

advantages of the preſent method of practice in a diſeaſe heretofore deemed ſo fatal, and my own experience confirms the concluſion; for in the above references no caſes are included which fell under my own inſpection.

A profuſe perſpiration of the head is not an unfrequent effect of the exhibition of mercury; and it ſhould be encouraged by wrapping the head in flannel, for it ſometimes affords ſpeedy relief, of which I ſhall relate, from my notes, the following inſtance:—October 23, 1784, I viſited Maſter E., a child of eighteen months old, who laboured under the hydrocephalus internus: his eyes were diſtorted, and in every poſition, without the power of ſeeing: his pulſe beat one hundred and ſixty ſtrokes in a minute: he ſhewed ſigns of great pain in his head, and frequently rocked it on the pillow. The right arm and leg were motionleſs. The bregma was ſoft and enlarged. I directed a bliſter, the *unguent. hydrarg. fort.*, and ſmall doſes of mercury internally. In twenty-four hours a moſt profuſe ſweating of the head came on. The pain and diſtortion of the eyes were conſidera-

of the Medical Society of London; Dr. Donald Monro's Letters and Eſſays.

bly

bly abated. Little inflammation or ſerous diſcharge had been produced by the bliſter. — October 25th, the power of motion was reſtored to his paralytic arm and leg, and he ſaw objects diſtinctly, as appeared by his catching at my watch when held before him. — On the 27th he relapſed into his former ſtate. — October the 30th he died; but permiſſion to examine the head could not be obtained.

The good effects of mercury in hydrocephalus internus are independent of ſalivation; and it is truly aſtoniſhing that very large quantities of the *unguent. hydrarg.* may be uſed in infancy and childhood without affecting the gums, notwithſtanding the prediſpoſition to a flux of ſaliva at a period of life incident to dentition. Between the 8th of February and the 7th of April, 1786, a child, under one year of age, received, by ſucceſſive frictions, four ounces, ſix drachms, and two ſcruples of the ſtronger mercurial ointment. One ſcruple was adminiſtered each time: the operation took up more than half an hour, and the part to which the ointment was applied was always previouſly bathed with warm water, precautions adapted to ſecure the full abſorption of the mercury. Thirty-ſeven grains of calomel were alſo given

at proper intervals, and in ſixteen doſes, during the ſame period. The child recovered without ſymptoms of ſalivation, and has ever ſince remained free from any painful affection of the head.

In the proſecution of the mercurial courſe it is neceſſary to guard againſt laxity in the bowels, or this remedy will be carried out of the ſyſtem, and produce no ſalutary effect. Coſtiveneſs, however, is not to be permitted, leſt it increaſe ſickneſs, fever, and pain: clyſters, therefore, of milk, oil and ſalt, ſhould be injected as often as they may be deemed expedient.

An acceleration of growth, to an extraordinary degree, is frequently obſerved after the dropſy of the brain has been ſubdued by mercury. In one caſe, which fell under my own direction in 1784, a young lady, nine or ten years of age, of a noble family in this county, increaſed two inches in ſtature within the ſpace of four months ſucceeding her recovery.

The comparative frequency of the hydrocephalus at different periods of life, the predispoſition of each ſex to it, and the duration of the diſeaſe, as deducible from the records of the twenty-ſix caſes to which I have already referred, are noted in the following table:

Age.

Age.

From birth to one year — —	2
—— one to two years — —	1
—— two to five — — —	8
—— five to ten — — —	6
—— ten to twenty — — —	5
—— twenty to thirty — —	4
	26

Sex.		*Event.*	
Males —	14	Died —	15
Females —	12	Recovered —	11

Duration *.

Two weeks and under — —	7
From two weeks to three, inclusive, —	6
—— three weeks to four, ——, —	4
—— one month to six weeks, ——, —	1
Three months, with intermission, —	1

This table is not sufficiently comprehensive to furnish any decisive conclusions; and it was my intention to have enlarged it, if leisure had

* The duration, I believe, is only stated in nineteen of the twenty-six cases.

permitted, by a review of the numerous cafes which have occurred in my own practice. Several at this inftant prefent themfelves to my recollection, which were of very long duration. The child mentioned above, to whom fox glove was given with injurious effect, fubfifted under the difeafe fixteen months. The malady came on by almoft infenfible degrees, and was attended with very little pain: his head was large, but neither the bregma nor the futures were open: his eyefight failed, and a complete amaurofis fucceeded. The left fide became paralytic; and in this melancholy fituation he continued till a fhort and flight attack of fever put an end to his exiftence. — Another cafe, about which I was conſulted, I fhall relate more at length, as it was attended with many curious and intereſting circumſtances. A lady, aged twenty-five years, of a healthy conſtitution, and of a florid complexion, was delivered of her third child in July, 1786. During the latter months of pregnancy ſhe was ſubject to frequent head-achs, attended with great coldneſs of the legs and feet. The head-achs abated after delivery; but in the ſucceeding month of October they recurred periodically every morning, and were generally alleviated during

during the courſe of the day. At this time ſhe ſuffered extremely from habitual coſtiveneſs. In December her oldeſt child, whilſt ſitting on her knee, was ſeized with a convulſion, which occaſioned ſuch terror and agitation in the mind of the mother as to aggravate, to a very great degree, the pains of her head. Bliſters, an emetic, and other means were directed, without any material or laſting relief. In February, 1787, a ſlight ſhaking of the head came on; and a phyſician in London, deſervedly held in high eſtimation, was conſulted, who delivered it as his opinion that the diſeaſe was an extravaſation of water in the brain. At this period the pupils of the eyes were greatly dilated, and the ſight ſo much affected, that ſhe was incapable of reading. Her ſpeech alſo was ſcarcely intelligible. In April application was made to another very eminent phyſician, who directed an iſſue between the ſhoulders capable of holding twenty-four peas, and afterwards adviſed the mercurial ointment, which was employed in the quantity of one drachm every night during the ſpace of a month. A profuſe ſalivation ſucceeded, but with little or no benefit. Electricity, the Bath waters, frequent emetics, ſtimulating cataplaſms to the head, &c. were

equally

equally inefficacious. February the 14th, 1788, I received a ſtatement of the caſe. The lady had then for ſome time declined all medical aſſiſtance; but ſhe ſuffered under an almoſt general paralyſis, and was incapable either of dreſſing or of feeding herſelf. Her head was ſometimes totally free from pain during the ſpace of a day or two, but always in ſo ſhaking a ſtate, that ſhe was obliged to uſe a ſteel ſupporter. The muſcles of the jaws were likewiſe ſo relaxed, that manducation was performed with great difficulty. In this long-protracted caſe there is reaſon to ſuppoſe that a ſerous effuſion ſubſiſted both in the ventricles and between the membranes of the brain; and it is not unlikely that the ſpinal marrow alſo was affected by a ſimilar compreſſion. Under ſuch circumſtances, and after the trial of ſo many active remedies in vain, directed by phyſicians of diſtinguiſhed ſkill and judgment, I felt a peculiar diffidence in offering any encouragement for the uſe of farther means. But when a great and good end is in view, the poſſibility of attainment is not only a juſtifying motive of exertion, but even renders it a duty; and experience evinces that ſucceſs ſometimes crowns our endeavours when there are no probable

grounds of expectation of it. I therefore recommended that the ſtrength of the patient ſhould be ſupported by a cordial and nutritive diet; by reſidence in a dry and temperate atmoſphere; and by gentle exerciſe, either natural or artificial. Of the latter kind, friction of the abdomen and of the ſpine, with new flannel, every night and morning, was particularly adviſed. As the iſſue in the back appeared to be too waſting a drain in ſo advanced a period of the diſorder, I hinted the propriety either of healing it or of dreſſing it only with one pea. The vapour bath was propoſed to the lady; which, by warming the whole habit, might give energy to the nervous and lymphatic ſyſtems. As the mercurial courſe had been tried without benefit, it could not be deemed expedient to renew it to any extent: but I conceived that ſmall quantities of the *unguent. hydrargyri* might be rubbed, with advantage, into the ſpine every night at bed time. If this were objected to, I mentioned the uſe of a volatile embrocation as a ſubſtitute. Sternutatories having ſometimes proved beneficial in hydrocephalic affections, I therefore ſuggeſted the uſe of them in the preſent caſe; and recommended the trial of muſk, æther, and the calx

of

of zinc. If an adequate degree of ſtrength to bear the fatigues of a ſea voyage were recovered by theſe or other means, I urged the attempt of it, at a proper ſeaſon of the year, as likely to produce a ſalutary revolution in the whole ſyſtem.

Such was the advice I gave in this intereſting and affecting caſe; and I regret that no other information has been communicated to me, of the reſult of it, than that the lady received conſolation and benefit from the plan propoſed to her trial.

Our imperfect knowledge of the ſtructure of the brain, and of the diverſified energy of the nerves in their origin, progreſs, and termination, neceſſarily involves the diſorders of the head in a peculiar degree of uncertainty; and it is often extremely difficult to diſcriminate even between the ſympathetic and idiopathic affections of that important organ. It cannot, therefore, be ſurpriſing that the cauſes of hydrocephalus have not hitherto been aſcertained with any degree of accuracy or preciſion. The light which diſſections afford is obtained only at the cloſe of the malady; and the ſtate of the encephalon may have undergone conſiderable changes, either by the operation of nature, or by

by the action of the medicines employed. A medical friend informs me that he lately assisted at the dissection of a child whose death was the consequence of a convulsive fit. The child had been indisposed about two months with frequent pains of the head. Worms had been suspected; but anthelmintic remedies afforded no relief. The vessels of the brain were found to be uncommonly turgid, and the ventricles contained about double or treble the ordinary quantity of serum. In this case I apprehend the turgescence of the vessels was the effect, and not the cause, of the convulsions; for the reflux of the blood from the head to the heart being obstructed during the fit, in which I believe the patient expired, the vascular distention must have been permanent. The redness and even blackness of the face, which takes place in convulsions, affords sufficient proof of sanguineous accumulation.

That the disorder under enquiry originates sometimes in inflammation, I can entertain no doubt, from several cases which have occurred within the circle of my observation; one of which I shall here briefly relate. Miss ——, a robust young lady, at a boarding-school in Manchester, after dancing very violently, went

out to the pump for a glaſs of cold water, which ſhe eagerly and haſtily drank. In a few minutes ſhe ran towards the wall, and leaning againſt it, cried out, oh my head! From this inſtant the pain never ceaſed; and becoming more and more acute, was ſucceeded by all the train of afflictive ſymptoms which characterize the hydrocephalus. At the end of three weeks ſhe died, and I was preſent at the opening of the head. The brain was found to be in a ſtate of inflammation; the veſſels were extremely turgid; and the venticles contained at leaſt ſeven ounces of water.

But I have reaſon to believe that hydrocephalus moſt frequently ariſes from glandular obſtruction, and either local or general plenitude. A family, with which I have been long and intimately connected, has repeatedly ſuffered from this formidable diſeaſe, as diſſections have manifeſted. But in the following inſtance, the fatal event took place before the extravaſation of water, which, from the ſtate of the brain, and the conſtitutional prediſpoſition, would probably have ſucceeded, if the diſeaſe had been of longer continuance. Maſter ——, a fine healthy boy, aged fifteen weeks, who fed heartily and grew very faſt after he was weaned; though

though regular in his ſtools and well exerciſed, was ſeized with convulſions, May 11th, 1772. He had been obſerved, a day or two preceding this attack, to be averſe to motion, and as there appeared to be no ſpecific ſymptoms of ſmall-pox or dentition, the diſeaſe was aſcribed to general plenitude. Gentle evacuations were therefore directed; bliſters applied; and anodyne and antiſpaſmodic remedies adminiſtered. By theſe means the fits gradually abated in frequency and violence. May 13th, the convulſions entirely ceaſed, and every ſymptom ſeemed to be favourable: but in the evening, his pulſe intermitted, his reſpiration became laborious, and ſometimes ſuſpended, and his countenance was ſunk and ghaſtly. By ſinapiſms, bliſters, and cordials, the vital powers were again rouſed: but the next evening he relapſed, and died early the ſucceeding morning. His body was opened. The viſcera of the abdomen and thorax were ſound, the meſentery excepted, the glands of which were much obſtructed and enlarged. The veſſels of the brain were turgid, but not inflamed; and no water was yet effuſed, either between the membranes or into the ventricles.

In a chronic affection of the head, of many years

years continuance, the patient informed me, that to hide certain marks left by glandular tumours in his neck, he uſed, for a long time, a ſtrong and broad ſtiffening under his neckcloth; and frequently tied it ſo tight, as to occaſion pains of the head, fluſhings of the face, and giddineſs. This practice he purſued till the commencement of the melancholy diſorder, about which he conſulted me; and was perſuaded that it greatly contributed to bring it on. The ſymptoms of the caſe were acute pains of the head; a vertigo in ſtooping; a ſenſe of fainting, when the head was ſuddenly thrown back; a ſtrabiſmus, and protruſion of one of the eyes; a paralytic debility of the whole frame; and a conſiderable diminution of mental energy. By the continued uſe of tonics and ſtimulants; by a cordial regimen; and by drinking goats-whey on the mountains in Wales, this gentleman's health is, in a tolerable degree, reſtored. Amongſt the ſtimulants employed, the mezereon root, mercury, and bliſters are comprehended. In this ſingular caſe, the internal veſſels of the head were probably at firſt over diſtended; and ſome degree of ſerous extravaſation permanently enſued. But the complaint was ſo gradually produced, that the vital actions ſuſtained a laſting injury

injury from turgeſcence of the brain, without any concomitant inflammation.

In reviewing ſome notes on Hydrocephalus, which I made many years ago, I find that of twenty-two caſes enumerated, eleven were known to be ſtrumous; three were ſuſpected to be ſuch; and four were accompanied with an enlargement of the head, probably from a rickety conſtitution. So that in eighteen of theſe caſes, the inflammatory diatheſis was not likely to prevail. But ſuch ſubjects, from the laxity of their fibres, muſt have been incidental to general or partial plenitude; to glandular obſtructions, and to a feeble action of the lymphatic ſyſtem. And theſe circumſtances peculiarly diſpoſe to an effuſion of water in the brain; becauſe that organ is ſo copiouſly ſupplied with veſſels of every order. For anatomiſts have eſtimated that one tenth of the whole maſs of blood circulates within it, although the weight of the encephalon does not exceed one fortieth part of the whole body. The following caſe affords ſome confirmation of this reaſoning. Maſter ——, the ſon of a ſtrumous parent, was born with a large head. Being a luſty child and growing well, the diſproportion became leſs obſervable within the ſpace of two years.

He was then attacked with a malignant itch, the cure of which proved very obſtinate; and when the eruption gave way, its receſſion was too ſudden. The child's appetite abated, and his fleſh, ſtrength, and ſpirits were much impaired. He was ſent into the country, where he ſeemed to be recruited. But about the end of May, he ſickened, grew languid, averſe to food, dull, watchful and yet drowſy. His countenance had that peculiar caſt, which led me to ſuſpect an effuſion of water in the brain, though his pulſe was not much changed, nor his eyes otherwiſe affected than by the loſs of their uſual brightneſs. June 2d. The pupils became dilated, and the pulſe was ſometimes ſlow and ſometimes quick. The child ſeemed to feel uneaſineſs in the head, but gave no ſigns of acute pain. June 3d. A complete amauroſis took place, with occaſional ſquinting and frequent convulſive ſtretchings of the limbs. The pulſe continued to be irregular, and the urine was voided in large quantities. No ſymptom of acute pain occurring, I examined the head attentively, but did not perceive either any opening of the ſutures, or ſoftneſs of the bregma. The mother informed me that the child's head had been gradually augmenting in

ſize,

ſize, during the laſt three months, without a proportionate growth of the reſt of the body, inſomuch that ſhe had been obliged to make for him new and large night-caps.

Practical writers have related many caſes of dropſical *metaſtaſis*. I have ſeen an affection of the brain, which appeared to be hydrocephalic, and probably originated in inflammation, ſuddenly and completely relieved by the attack of an acute pain in the ſide, which terminated in a fatal abſceſs and hydrothorax. When an inciſion was made through the cartilage of the third rib, a quantity of water flowed out of the cheſt. The ſternum being removed, evident marks of inflammation were diſcovered; the lungs adhered ſtrongly on every ſide to the pleura, and were covered with a purulent matter. An open abſceſs was found in the poſterior lobe of the left ſide, the rupture of which, in all likelihood, occaſioned the ſudden death of the patient. Not being preſent at this diſſection, I had afterwards to regret that the ſurgeon omitted to examine the ſtate of the brain.

Whether the following caſe, with which I ſhall conclude theſe obſervations, is to be aſcribed to *metaſtaſis*, I leave to the deciſion of the reader. Mr. C.'s daughter, aged nine years,

after labouring under the ſymptoms of phthiſis pulmonalis four months, was affected with unuſual pains in her head, which increaſed rapidly to ſuch a degree, as to occaſion frequent ſcreamings. The cough, that had before been extremely violent, and attended with ſtitches in the breaſt, now abated; and in a few days ceaſed almoſt intirely. The pupils of the eyes became dilated; a ſtrabiſmus enſued; and in about a week, death put a period to her agonies.

P. S. The foregoing practical obſervations have been drawn up from my notes, or from reflection, without conſulting, at the time, any books on the ſubject. But ſince theſe were written, I have peruſed, with attention, a valuable and very intereſting work, lately publiſhed by Dr. Quin, on the dropſy of the brain. The view which he has given of this diſeaſe appears to be, in general, judicious and accurate; yet I am inclined to aſcribe leſs than he does to inflammation; and conſequently ſhould recommend much caution in the uſe of blood letting, even in the firſt ſtage. For the veſſels of the brain ſeem quickly to loſe their tone by diſtention; and great torpor and debility of the whole ſyſtem ſucceed. If depletion, therefore, be indicated

dicated, it will be beſt accompliſhed by a ſtimulating mercurial purgative, and by the application of a large bliſter to the head. For Dr. Quin is miſtaken in ſuppoſing, that the mercurial unction was ever directed to that part of the body, either by Dr. Dobſon or myſelf. He has fallen likewiſe into another error, in ſtating that the firſt patient cured by Dr. Dobſon, of Hydrocephalus, was his own child, and that the fortunate event depended on the opportunity that this afforded of the moſt early attention. This, indeed, was the caſe, with reſpect to one of the early hiſtories, which I have related; and I acknowledge the juſtice of the Doctor's concluſion concerning it.

Mancheſter,
May 20, 1791.

XIV. *An Account of the Preparation, Mode of Application, and Effects, of a Liniment recommended by* Roncalli *in the Treatment of ſcrophulous Tumours. By* Henry Streitt, *Profeſſor of Chirurgical Pathology in the Imperial and Royal Medico-Chirurgical Academy at Vienna.* Vide *Abhandlungen der K. K. Joſephiniſchen Medizin. Chirurg. Akademie zu Wien.* Vol. I. 4to.

THE remedy here recommended for the cure of ſcrophulous tumours was made public ſo long ago as the year 1741, by Roncalli, who obtained it from a ſurgeon at Modena; and the author of the paper before us claims only the merit of bringing it again into notice.

Roncalli deſcribes the preparation and manner of uſing it in theſe words:

" Felli bovino in ſua cyſti integro addantur " tria cochlearia ſalis communis & olei nucum; " cyſti deinde aliquo temporis intervallo, aut " ſoli, aut leviſſimo calori, expoſita. Stuppæ " ichore illo humectatæ, bis in die ſcrophuloſis " tumoribus aptentur." *

* Hiſt. Morborum. Folio, Brixiæ, 1741, p. 42.

Profeſſor

Profeſſor Streitt obſerves of this liniment, that repeated trials have convinced him, firſt, that whenever a ſcrophulous tumour is capable of being diſperſed, ſuch an effect may in general be expected from the uſe of this application; ſecondly, that when the tumour cannot be diſperſed, the uſe of the liniment ſerves to promote ſuppuration; and thirdly, that in thoſe inveterate ſwellings, or ſpecies of ſcirrhus, which neither diſperſe nor come to ſuppuration, a long-continued uſe of it has been found to leſſen the bulk of the tumour to a conſiderable degree, ſo as to leave only, as it were, a very ſmall nucleus.

Ten caſes are related in which this application was tried, but in the greater number of theſe, as the author very candidly informs us, internal remedies were occaſionally adminiſtered during its uſe.

The ſubject of the firſt caſe was a ſoldier, nineteen years old, who had large glandular ſwellings in the neck and under the lower jaw.

In this caſe the uſe of the liniment was begun on the 9th of July.

On the 17th the ſurface of the tumour was inflamed and covered with veſicles, which made it neceſſary to ſuſpend the uſe of the liniment.

till the 21ſt, when it was again had recourſe to. The ſwellings had now ſomewhat diminiſhed; but on the 9th of Auguſt freſh veſicles appeared, and the uſe of the liniment was obliged to be again ſuſpended till the 18th.

At this period of the caſe the ſwellings were diminiſhed to half their former bulk. The uſe of the liniment was continued without interruption from the 18th of Auguſt till the 13th of September, when it was again neceſſarily ſuſpended, during ſix days, on account of the appearance of freſh veſicles.

On the 30th of September the ſwellings were entirely diſperſed, and the patient was diſcharged cured.

The internal remedies given in this caſe were, a purgative medicine, compoſed of jalap and cream of tartar, at the beginning of the treatment; and afterwards a decoction of the roots of bardana and polypodium, with pills compoſed of ſoap, gum ammoniac, and rhubarb.

The ſecond patient was a ſoldier, aged twenty-three years, who was admitted under our author's care on the 20th of June, 1786, with a ſwelling of the ſubmaxillary glands of the right ſide as large as a hen's egg, and ſeveral other

other conſiderable ſwellings of the glands of the neck on the ſame ſide.

The uſe of the liniment was begun in this caſe on the 9th of July, and on the 14th the ſwellings were evidently beginning to leſſen and to become ſofter, ſo that by the end of the month they were reduced to half their former ſize.

The uſe of the liniment was diligently continued during all this time, excepting, that in order to prevent veſications, it was ſometimes omitted, or more ſparingly applied; as the ſtate of the ſkin, from the greater or leſs degree of redneſs, ſeemed to require.

Before the end of Auguſt all the ſwellings were diſperſed except two which were ſtill large though of a ſofter conſiſtence, and theſe were entirely removed about the middle of September, on the 23d of which month the patient was diſcharged cured.

The ſame internal remedies were given in this as in the firſt caſe.

The third patient was a ſoldier, aged twenty years, who had a large ſwelling of the ſubmaxillary gland.

He began the uſe of the liniment on the 23d of January 1787. The tumour was well

rubbed

rubbed with it and a pledgit previouſly moiſtened with it was alſo applied to the part, and renewed twice a day; care being taken, however, to watch the ſtate of the ſkin, and to omit the liniment, or to leſſen the quantity of it, as occaſion required.

In the ſpace of a month, without any aſſiſtance from internal remedies the tumour was entirely diſperſed, and on the 25th of February the patient was diſcharged cured.

The ſubject of the fourth caſe was a young prince, fifteen years old, who had a large ſcrophulous ſwelling of the glands of the neck under his right ear, of five years ſtanding, which deformed his whole face. The ſurface of the ſkin was not diſcoloured, and the tumour itſelf was indolent and moveable.

In this caſe there was alſo an enlargement of the thyroid gland.

The tumours were rubbed gently every night for a quarter of an hour with the liniment, and ſome of it was applied to them on pledgits and kept on all night. When it excited veſication, the uſe of it, as in the former caſes, was occaſionally ſuſpended. In this manner the treatment was continued during three months, at the end of which time we are told the ſwelling

of the glands under the ear was almoſt entirely diſperſed, and that of the thyroid gland was much leſſened.

In the fifth caſe, as in that laſt related, a tumour of the parotid and ſubmaxillary glands was only partially diſperſed.

In the ſixth, which was alſo a caſe of glandular ſwelling of the neck, the tumour ſuppurated.

In the ſeventh, which was a ſwelling of the right parotid and ſubmaxillary glands, of three years ſtanding, the uſe of the liniment was perſevered in during the ſpace of five months, but at the end of that time although the ſwelling of the parotid gland is ſaid to have been almoſt entirely diſperſed, the ſubmaxillary glands were ſtill large and indurated.

In the eighth caſe the ſucceſs of the liniment was alſo incomplete; a large ſcrophulous ſwelling of the parotid and ſubmaxillary glands having been only partially leſſened by its application.

The ſubject of the ninth caſe was a ſoldier, aged twenty-five years, who had a white ſwelling of his left knee, which had been coming on ſlowly about two years, but in which there was as yet no appearance of fluctuation. Different topical applications were tried, and among others

others the Hungarian remedy *, compoſed of gum ammoniac and vinegar. By means of this laſt the tumour ſeemed to be ſomewhat diminiſhed, but an intolerable itching made it neceſſary to ſuſpend its uſe on the eighteenth day of the treatment. Recourſe was now had to the liniment three or four times a day, and in about ſix weeks, without the aſſiſtance of any other internal remedy than a ſingle purgative medicine the ſwelling was removed, and the patient, at the end of two months, was diſmiſſed cured.

In another patient, a man aged thirty five years, who had a ſimilar complaint, which had alſo been ſlowly coming on, a cure was effected by the ſame means in a ſtill ſhorter time; for at the end of five days the tumour began ſenſibly to diminiſh, and before another week had elapſed he was almoſt entirely cured: this man took a mercurial purge twice during the treatment.

Roncalli, as we have ſeen, directs the liniment to be uſed only twice a day; but we find our author ſometimes applying it more frequently; though he acknowledges that by ſo doing the cure is not always accelerated; its

* For an account of this remedy ſee the firſt volume of the London Medical Journal, page 194.

operation

operation on the ſkin when it is often repeated, rendering it neceſſary to ſuſpend its uſe from time to time, ſo that its effects in this reſpect will, of courſe, require to be particularly attended to.

XV. *An Account of the Tabaſheer. In a Letter from* Patrick Ruſſell, *M. D. F. R. S. to Sir* Joſeph Banks, *Bart. P. R. S.*—Vide *Philoſophical Tranſactions of the Royal Society of London. Vol.* LXXX. *for the Year* 1790. *Part.* II. 4to. London, 1791.

THE drug, which is the ſubject of the paper before us, has long been a medicine of high repute in the Eaſt, and is mentioned by all the Arabian Medical writers, as an important article of their materia medica.

To the Arabs and Turks it is known under the name of Tabaſheer only; and under that name alſo it is mentioned in the writings of the Arabian phyſicians.

In the Gentoo language it is called *Vedrocopaloo*, Bamboo milk; in the Malabar, *Mungel Upoo*, ſalt of Bamboo; and in the Warriar, *Vedroo Carpooram*, Bamboo Camphor.

Our author obſerves, that Garcias ab Horto long ago pointed out a dangerous error, common to the old tranſlators of the Arabian writers, reſpecting this drug; Tabaſheer, in the Latin verſions of Rhazis and Avicenna, being conſtantly rendered *ſpodium*, and this interpretation having been adopted by moſt of the ſubſequent tranſlators of other Arabian medical writers.

The late Mr. Channing, when engaged in the tranſlation of Rhazis on the ſmall-pox, applied, it ſeems, to our author, then in Syria, for ſuch information as he might be able to collect on the ſubject of Tabaſheer at Aleppo. Dr. Ruſſell, accordingly tranſmitted to him various ſpecimens of the drug, together with ſeveral extracts relative to it, from books found in the Aleppo libraries; but he is now convinced, he tells us, that much of the drug commonly vended in Turkey is fictitious or adulterated.

The Arabian medical writers generally agree in ſuppoſing the Tabaſheer to be a production of the Indian reed; more eſpecially of ſuch as have ſuffered from fire, kindled by the friction of the reeds one againſt the other, an accident that is ſaid to happen frequently in the dry ſeaſon.

Our

Our author has been aſſured, he tells us, by ſeveral mountaineers, with whom he has converſed on the ſubject, that the bamboo is not the only tree ſubject to accidental ignition by friction; but theſe people added that they never looked for Tabaſheer in the half-burnt fragments of the bamboo, though they doubted not it might ſometimes be found there as well as in others.

Dr. Ruſſell is convinced that the genuine Tabaſheer is a production of the *Arundo Bambos* Linn. the *Ily* of the Hortus Malabaricus, and the *Arundo Indica arborea maxima, cortice ſpinoſo*, of Herman; but he thinks it no leſs certain that fire is not a neceſſary agent in its production.

He obſerves that the bamboo, in which the Tabaſheer is found, is vulgarly called the Female Bamboo, and is diſtinguiſhed by the largeneſs of its cavity from the male. They are even ſaid, it ſeems, to be ſeparate trees; but this fact he has not been able to aſcertain.

Of the ſeven pieces of bamboo which accompanied the paper before us, four, we are told, were from the mountains near Vellore, and three from a ſpot diſtant about twenty miles from Vizagapatam, the place from which the author dates * his letter. The former were perfectly

* Nov. 26, 1788.

green

green on their arrival at Madras; and the others were ſtill ſo when they came to his hands. Theſe, he obſerves, were all ſelected on a conjecture of their containing Tabaſheer, from a certain rattling perceived upon ſhaking the bamboo, as if ſmall ſtones were contained in the cavity. This, by the natives, is conſidered as an indication of Tabaſheer being contained in one or more joints of the bamboo, and, it ſeems, they are ſeldom diſappointed; but it does not always follow that there is no Tabaſheer where a rattling is not perceptible; for upon ſplitting a number of reeds, it was ſometimes remarked, that where the quantity of the drug was inconſiderable, it was found adhering ſo cloſely to the ſides of the cavity, as to prevent any rattling from being perceived upon ſhaking. In general, however, our author has found the rule of the natives, for chooſing the bamboo, a good one.

On examining one of the bamboos, conſiſting of ſix joints, from Vellore, Dr. Ruſſell found Tabaſheer only in two of the joints, and in theſe the quantity was various, amounting in the whole to about twenty-ſeven grains.

The quality alſo, he obſerves, was various. The particles reckoned of the firſt quality, and which

which did not exceed four grains in weight, were of a bluiſh white colour, reſembling ſmall fragments of ſhells. They were harder than the others; and when rubbed between the fingers eaſily crumbled into a gritty powder, which had a ſlight ſaline teſtaceous taſte. The reſt were of a cineritious colour, rough on the ſurface, and more friable; and intermixed with theſe were ſome larger, light, ſpongy, particles, ſomewhat reſembling pumice ſtones. Dr. Ruſſell thinks it probable, that the Arabs, from theſe appearances of the drug, were led into the opinion already mentioned of its production.

The two middle joints, he obſerves, were of a pure white colour within, and lined with a thin film, and it was in theſe chiefly the Tabaſheer was found. The others, particularly the two upper joints, were diſcoloured within, and in ſome parts of the cavity was found a blackiſh ſubſtance in grains, or in powder, adhering to the ſides, the film being there obliterated.

Thirty-ſeven green bamboos, brought from the hills fifty miles diſtant from Vizagapatam, being carefully ſplit and examined, the reſult we are told, was as follows.

In nine out of the thirty-ſeven there were no veſtiges of Tabaſheer. In twenty-eight ſome

were found in one, two, or three joints of each; but never in more than three joints of the ſame bamboo. The quantity varied, but in all was inconſiderable; and the empty joints were ſometimes contiguous, ſometimes interrupted, indifferently.

Dr. Ruſſell obſerves that the whiter, ſmooth, harder particles, when not looſe together with the others in the cavity, were moſtly found adhering to the ſeptum that divides the joints, and to the ſides contiguous; but never to the ſides about the middle of the joints; and that inſtead of being chiefly found at the lower extremity of the joint, as might be expected from the juice ſettling there, they were found adherent indifferently to either extremity, and ſometimes to both. In this ſituation they formed a ſmooth lining, which uſually was cracked in ſeveral places, and might eaſily be detached with a blunt knife.

In ſome joints, the Tabaſheer was found thus collected at one or both extremities only, and in ſuch no rattling was perceived upon ſhaking the bamboo; but in general, we are told, while ſome adhered to the extremities of the joint, other detached pieces were intermixed with the coarſer looſe particles in the cavity.

The

The quantity found in each bamboo is ſaid to have been very inconſiderable; the produce of the whole twenty-eight reeds, from five to ſeven feet long, not having much exceeded two drachms. The author therefore thinks it very probable that the Tabaſheer, though not abſolutely confined to certain regions, may be produced in greater abundance in ſome ſoils than in others; but that in all regions where the bamboo grows favourably, ſome proportion of it will be found, however it may vary in quality or quantity.

Rumphius, who very candidly acknowledges that he himſelf had not had opportunities of making enquiries on this ſubject, refers his readers to Garcias, who has remarked that the Tabaſheer is not found in all bamboos, nor in all the branches indiſcriminately; but only in thoſe growing about Biſnagur, Batecala, and one part of the Malabar coaſt.

With reſpect to Biſnagur our author has been informed in a letter from one of his medical friends at Hydrabad, "That though Tabaſheer be in great requeſt at Hydrabad, and "bears a high price, it is never brought "thither from Biſnagur; that ſome of what is "found in the Bazars is brought from the Ar-

" cour paſs in Canoul, and ſome from Emna-
" bad, at the diſtance of about eighty miles to
" the N. W.; but that the greateſt part comes
" from Maſulipatam.

" That there are two ſorts ſold in the Bazars;
" one at the rate of a rupee a drachm; the
" other, of inferior quality, at half the price;
" but that this is ſaid to be chiefly compoſed of
" burnt teeth and bones.

" That he was informed by a Perſee, who
" had been in Bengal, that the Tabaſheer was
" produced in great quantities at Sylhet, where
" it ſold by the pound from one rupee to one
" and a half, and formed a conſiderable article
" of trade from Bengal to Perſia and Arabia."

Dr. Ruſſell has procured ſome of the prime ſort of Tabaſheer from Hydrabad, and found it to differ materially from his own ſpecimens, not only in its ſuperior whiteneſs, and in its being leſs mixed with impure particles, but alſo in being much harder and heavier, and ſcarcely in any degree friable to the finger.

With reſpect to the ſuppoſed formation of Tabaſheer from the juice of the recent bamboo Dr. Ruſſell firſt quotes Rumphius, who remarks that in Amboina " Juniores arundines plerum-
" que in inferioribus ſuis nodis ſemi-repletæ

" utcunque ſunt lympida aqua potabili, quæ " hiſce in terris ſenſim evaneſcit, in aliis vero " regionibus exſiccatur in ſubſtantian albam " et calceam quæ *Tabaxir* vocatur."

Garcias, as our author obſerves, gives an account ſomewhat different from this. " Inter " ſingula internodia liquor quidam dulcis ge- " neratur, craſſus veluti amylum congeſtum, " et ſimili candore, interdum multus, nonnun- " quam vero perpaucus. Sed non omnes arun- " dines ſive rami eum humorem continent. . . . " . . . . Hic autem liquor concretus, interdum " nigricans et cinereus invenitur, ſed non ideo " improbatur. Nam aut ob nimiam humidi- " tatem, aut quod diutius ligno incluſus " permanſerit, hunc ſibi colorem conciliat : " non autem ob arborum incendium, veluti " nonnulli putarunt. Siquidem in multis " ramis, quos non contigit ignis, niger etiam " invenitur *.

The exiſtence of this fluid in the bamboo is known by ſhaking the joint. In a conſiderable number of bamboos Dr. Ruſſell never found water in more than two joints, and generally not more than two or three drachms in each. The

* Cap. 12.

largeſt quantity procured by him at one time was one ounce and a half; very few joints, in proportion, being found to contain any.

The fluid, he obſerves, was always tranſparent, but varied in conſiſtence; when thicker it had a whiter colour than uſual; when more dilute it differed little to the eye from common water, except that ſometimes it had a pale greeniſh caſt. Applied to the tongue it had a ſlight ſaline, ſub-aſtringent taſte, more or leſs perceptible in proportion to the conſiſtence of the fluid. After evaporation in the ſun, the reſiduum had a pretty ſtrong ſaline taſte, with leſs aſtringency. Some of the fluid, of a darkiſh colour, thickened in the reed to the conſiſtence of honey; while ſome, in another part of the reed, was perfectly white and almoſt dry; both, we are told, had the ſharp ſalt taſte, which the Tabaſheer itſelf loſes in a great degree by keeping.

From an ounce of fluid of a greeniſh caſt, and ſlight ſaline taſte, procured from green bamboos, our author obtained by ſlow evaporation ſmall particles of a whitiſh colour reſembling the inferior ſort of Tabaſheer.

As a further proof that this ſubſtance is formed in the cavity of the bamboo, we learn, from

from our author's obſervations, that recent green bamboos, which, upon ſhaking, appeared to contain water in their cavity, loſt this appearance after ſtanding a few days; and that when ſplit, after they had ceaſed to give any ſound by ſhaking, ſometimes no fluid was found in the cavity. The interior thin pellicle, however, was diſcoloured, as if by recent moiſture; and in general ſome of the fluid, in a mucilaginous ſtate, remained at the lower part of the joint.

In the latter end of October, a green bamboo of five joints was brought to him, which appeared to contain both water and Tabaſheer. After three days, the ſound of water, upon ſhaking the reed, could hardly be perceived; and on the fifth day it was intirely imperceptible. Upon ſplitting the bamboo about half a drachm of the fluid, now thickened into a mucilage, was found at the bottom of the upper joint. The ſecond joint contained ſome perfect Tabaſheer looſe in the cavity. The third joint was empty, excepting a few particles of Tabaſheer which adhered to the ſides near the bottom. The fourth joint, at the bottom, contained above a drachm of a browniſh pulpy ſubſtance adherent. The laſt joint, in like manner, con-

tained half a drachm of a ſubſtance thicker and harder in conſiſtence, and nearly of the colour of white wax.

This ſpecimen, as the author obſerves, exhibited at one view the progreſs of the Tabaſheer through its ſeveral ſtages.

In a poſtſcript to this letter, dated Weymouth Street, July 16th, 1790, we are informed that four of the green reeds preſented to the ſociety on the night the preceding account was read, having been carefully ſplit, the contents, upon comparing them with the ſpecimens ſent from India, then on the table, were found to agree in all reſpects, as well as with the deſcription of the more recent ones given in this paper. *

XVI.

* In addition to the above account of the Tabaſheer, from the Philoſophical Tranſactions, the following extract of a letter, on the ſame ſubject, addreſſed to the Editor of this work, will it is preſumed not be unacceptable to the reader; and more eſpecially as it ſerves to confirm the opinion of Dr. Ruſſell with reſpect to the formation of this ſubſtance. It is written by Mr. J. L. Williams, an ingenious Surgeon in the ſervice of the Hon. Eaſt India Company, in Bengal, and is dated at Benares, October 23, 1790.

'I have lately procured from the hills in this neighbourhood, 'a drug, ſpecimens of which I ſhall ſend, by the ſhips of this 'ſeaſon, for your inſpection.

'It

XVI. *Account of the Nardus Indica, or Spike-nard.* *By* Gilbert Blane, *M. D. F. R. S.* — Vide *Philoſophical Tranſactions of the Royal Society of London,* Vol. LXXX. *for the Year* 1790, Part II.

IN ſome very judicious reflections, with which this account of the Nardus Indica is prefaced, Dr. Blane expreſſes his regret that the records of antiquity afford ſuch imperfect deſcriptions of natural objects, particularly of thoſe of the vegetable kingdom. Moſt of the writings of the ancients, he obſerves, have come down to us either mutilated by the accidents

‘ It is called in Perſian, *Tabaſheer*; in Hindoo, *Buns-lochun* ‘ or ſalt of the Bamboo. It has a peculiar quality of ſtrongly ‘ adhering to the tongue, and is held in great eſteem by the ‘ natives in a variety of diſeaſes; but I have not yet been able ‘ to aſcertain its virtues from my own experience.

‘ In a Perſian work (the Tofut ul-Monein of Mahomed ‘ Monein Hoſeiny) I have found the following obſervations ‘ on this ſubſtance, and its ſuppoſed medicinal properties, viz.

“ It (i. e. the Tabaſheer or Buns-lochun) is procured “ from the cavity of the Indian reed or Bamboo; and it is ſaid “ that when, from the violence of the winds, fire takes hold of “ thoſe reed thickets, the Tabaſheer is formed of the joints of “ the reeds, which are ſeparated from the aſhes thereof. The “ beſt kind is of a white colour, and of a roundiſh ſhape, “ having to the palate a ſmall degree of a rough and biting “ taſte. - - - - There is a factitious kind made of burnt bones; but

dents of time, or corrupted by unfaithful and ignorant tranſcribers; and he ſeems to think that the learned works upon profeſſional ſubjects have been more unfortunate in theſe reſpects than works of imagination and general ſcience. But even ſuppoſing the works of Theophraſtus, Dioſcorides, and the other ancient phyſicians and naturaliſts, to be extant in their utmoſt completeneſs and purity, ſtill their method of deſcribing plants and other natural bodies was ſo defective, that very few of them, he obſerves, could now be recognized; for we have not only to contend with the obſcurity belong-

" but this has but a ſmall degree of bitterneſs to the taſte, and " poſſeſſes no ſtrength. - - - The Tabaſheer will not diſſolve " in water. - - - - It puts a ſtop to bilious vomitings and to " the bloody flux. It is alſo of ſervice in caſes of palpitation " of the heart, in faintings, and for ſtrengthening thoſe mem- " bers of the body that are weakened by heat. It is uſeful alſo " for the piles, and for acute or burning fevers, and for puſtules " in the mouth (thruſh); and, given with oxymel is of ſervice " againſt reſtleſſneſs, melancholy, and hypochondriacal affec- " tions. - - - - The habitual internal uſe of it is prejudicial to " the virile powers. It is alſo ſaid to be prejudicial to the lungs. " Its correctives are the gum of the pine and honey. The doſe " of it is to the weight of two d'herems or ſeven maſhás'."

' With the ſpecimens of this drug, I ſhall alſo ſend you a ' piece of the Bamboo unopened, with ſome of the ſalt, or ſu- ' gar, in it; from which you will be convinced that the Ta- ' baſheer is not formed by the burning of the bamboo, as the ' author juſt now quoted, and others, have ſuppoſed.'

ing

ing to a dead language, in ſo far as the name merely is concerned, but it would be impoſſible, as he juſtly remarks, even in a living language, to perpetuate the knowledge of any object in nature, ſuch as a plant, without ſome deſcription to diſcriminate it from all others. For want of ſuch deſcription the knowledge contained in the writings of the ancient naturaliſts could, he thinks, be of uſe only to their contemporaries and countrymen, who were already acquainted with the objects of it, but could afford no certain information to the ignorant in diſtant countries and future ages. Of all the ancient medicines, he obſerves, there is perhaps none but opium of which the identity can be unqueſtionably aſcertained; of moſt of them little more being ſaid than merely giving their names: ſo that the fruits of the ingenuity and labour of one age have, in a great meaſure, in conſequence of this ambiguity, been loſt to another. Poſterity will, therefore, he adds, be greatly indebted to thoſe induſtrious naturaliſts of the preſent times, who are carrying the deſcription of nature to an unexampled height of improvement.

Dr. Blane has been led, he tells us, to his reflections on this ſubject by an account ſent to him,

him, ſome time ago, by his brother in India, of the Spikenard, or *Nardus Indica*, a name familiar in the works of the ancient phyſicians, naturaliſts, and poets; but the identity of which has not hitherto been ſatisfactorily aſcertained. He ſays, in a letter dated Lucknow, December, 1786, that "travelling with the Nabob "Viſier, upon one of his hunting excurſions, "towards the northern mountains, I was ſur-"priſed one day, after croſſing the river Rapty, "about twenty miles from the foot of the hills, "to perceive the air perfumed with an aroma-"tic ſmell; and, upon aſking the cauſe, I was "told it proceeded from the roots of the graſs "that were bruiſed or trodden out of the ground "by the feet of the elephants and horſes of the "Nabob's retinue. The country was wild and "uncultivated, and this was the common graſs "which covered the ſurface of it, growing in "large tufts cloſe to each other, very rank, "and in general from three to four feet in "length. As it was the winter ſeaſon, there "was none of it in flower. Indeed the greateſt "part of it had been burnt down on the road "we went, in order that it might be no impe-"diment to the Nabob's encampments.

"I col-

" I collected a quantity of the roots to be
" dried for uſe, and carefully dug up ſome of
" it, which I ſent to be planted in my garden
" at Lucknow. It there throve exceedingly,
" and in the rainy ſeaſon it ſhot up ſpikes about
" ſix feet high. Accompanying this I ſend
" you a drawing of the plant in flower, and of
" the dried roots, in which the natural appea-
" rance is tolerably preſerved.

" It is called by the natives *Terankus*, which
" means literally, in the Hindoo language,
" fever-reſtrainer, from the virtues they attri-
" bute to it in that diſeaſe. They infuſe about
" a drachm of it in half a pint of hot water,
" with a ſmall quantity of black pepper.
" This infuſion ſerves for one doſe, and is re-
" peated three times a day. It is eſteemed a
" powerful medicine in all kinds of fevers,
" whether continued or intermittent. I have
" not made any trial of it myſelf; but ſhall
" certainly take the firſt opportunity of doing
" ſo.

" The whole plant has a ſtrong aromatic
" odour; but both the ſmell and the virtues
" reſide principally in the huſky roots, which
" in chewing have a bitter, warm, pungent
" taſte, accompanied with ſome degree of that

" kind

" kind of glow in the mouth which carda-
" moms occaſion."

Beſides the drawing, a dried ſpecimen, we are told, has been ſent, which was in ſuch good preſervation as to enable Sir Joſeph Banks, P. R. S. to aſcertain it by the botanical characters to be a ſpecies of *Andropogon*, different from any plant that has uſually been imported under the name of Nardus, and different from any of that genus hitherto deſcribed in botanical ſyſtems.

Our author is of opinion, however, that there is great reaſon to ſuppoſe it to be the true *Nardus Indica* of the ancients; for firſt the circumſtance, in the account above recited, of its being diſcovered in an unfrequented country from the odour it exhaled by being trod upon by the elephants and horſes, correſponds, he obſerves, in a ſtriking manner, with an occurrence related by Arrian, in his Hiſtory of the Expedition of Alexander the Great into India. It is there mentioned, lib. vi. cap. 22. that during his march through the deſerts of Gadroſia the air was perfumed by the Spikenard, which was trampled under foot by the army. Secondly, though the accounts of the ancients concerning this plant are obſcure and defective,

defective, it is evident, he thinks, that it was a plant of the order of *gramina*, as the term *ariſta*, ſo often applied to it, was appropriated by them to the fructification of grains and graſſes. The term *ſpica*, he farther obſerves, is applied to plants of the natural order *verticillatæ*, in which there are many ſpecies of fragrant plants, and the lavender, which being an indigenous one, affording a grateful perfume, was called *Nardus Italica* by the Romans; but we never find the term *ariſta* applied to these. The poets, as well as the naturaliſts, conſtantly apply this term to the true Nardus. In proof of this our author refers to Statius, who calls the Spikenard *odoratæ ariſtæ*; to Ovid, who in mentioning it as one of the materials of the phœnix's neſt, calls it *Nardi levis ariſta*; and to a poem on the ſame ſubject, aſcribed to Lactantius, where the epithet *pubentis* in the expreſſion of *his addit teneras Nardi pubentis a iſtas*, ſeems even to point out that it belonged to the genus *andropogon*, a name given to it by Linnæus from this circumſtance. Galen, it ſeems, ſays, that though there are various ſorts of Nardus, the term Ναρδο-σαχυς, or Spikenard, ſhould be applied only to the *Nardus Indica*. It would appear, our author obſerves, that

that the *Nardus Celtica* was a plant of a different habit, and is ſuppoſed to be a ſpecies of valeriana. He is aware that Pliny's deſcription of the Nardus Indica does not correſpond with the ſpecimen which is the ſubject of the preſent account, for he ſays it is *frutex radice pingui et craſſa*, whereas this has ſmall fibrous roots. But as Italy is very remote from the native country of this plant, Dr. Blane thinks it reaſonable to ſuppoſe, that others, more eaſily procurable, uſed to be ſubſtituted for it; and the more ſo, as, according to the author laſt mentioned, there were nine different plants by which it could be imitated and adulterated. Our author finds a *Nardus Aſſyria* mentioned by Horace, and a *Nardus Syriaca* by Dioſcorides, as a ſpecies different from the *Indica*; and both Dioſcorides and Galen, he adds, by way of fixing more preciſely the country from whence it comes, call it alſo *Nardus Gangites*. Thirdly, Garcias ab Horto, the only writer perhaps, Dr. Blane remarks, who appears to have ſpoken of it in its recent ſtate, from his own obſervations, has given a figure of the roots, or rather the lower part of the ſtalks, which correſponds with our author's ſpecimen. Fourthly, the ſenſible qualities of this ſpecimen are ſuperior,

we

we are told, to what commonly paſſes for it in the ſhops, being poſſeſſed both of more fragrancy and pungency; which ſeems to account for the preference given to it by the ancients.

It has been a ſubject of inquiry with Mathiolus; whether the roots or ſtalks of this plant were the parts moſt eſteemed by the ancients. The roots of Dr. Blane's ſpecimen, it ſeems, are very ſmall, and poſſeſs ſenſible qualities inferior to the reſt of the plant; yet it is mentioned, in the account above recited; that the virtues reſide principally in the *huſky roots*. It is evident, he obſerves, that by the huſky roots muſt be meant the lower parts of the ſtalks and leaves where they unite to the roots; and he thinks it probable that to a ſlight inaccuracy of this kind is owing the ambiguity on this point that occurs in the ancient accounts.

With regard to the virtues of this plant, Dr. Blane obſerves, that it was highly valued anciently as an article of luxury as well as a medicine. He finds the *unguentum nardinum* ſpoken of as a favourite perfume at the ancient baths and feaſts; and he learns from a paſſage in Horace, that it was ſo valuable, that as much of it as could be contained in a ſmall box of precious ſtone was conſidered as an equivalent

for a large veſſel of wine, and a handſome quota for a gueſt to contribute at an entertainment, according to the cuſtom of antiquity :

—— *Nardo vinum merebere*
Nardi parvus onyx eliciet cadum.

Its ſenſible qualities, we are told, do not depend on a principle ſo volatile as eſſential oil ; and this, our author thinks, would be a great recommendation of it to the ancients, as its virtues would thereby be more durable, and they were not acquainted with the method of collecting eſſential oils, being ignorant of the art of diſtillation. He finds the fragrance and aromatic warmth of the Nardus to depend on a fixed principle, like that of cardamoms, ginger, and ſome other ſpices. He has tried to extract its virtues by boiling water, by maceration in wine and in proof ſpirits ; but to all theſe menſtrua it yielded them but ſparingly and with difficulty.

As a remedy, both external and internal, it had a high character among the ancients. Dr. Blane finds it one in the liſt of ingredients in all the antidotes, from thoſe of Hippocrates, as given on the authority of Myrepſus and Nicolaus Alexandrinus, to the officinals which have kept their ground till modern times under the

names of Mithridate and Venice Treacle. He obſerves that it is recommended by Galen and Alexander Trallian in the dropſy and gravel; that Celſus and Galen employed it both externally and internally in pains of the ſtomach and bowels; and that the latter of theſe phyſicians having been called to attend Marcus Aurelius, when that Emperor was ſeverely afflicted with an acute complaint in the bowels, the firſt remedy he applied was warm oleum nardinum on wool to the ſtomach.

It appears that the natives of India conſider it as an efficacious remedy in fevers; and Dr. Blane obſerves, that its ſenſible qualities promiſe virtues ſimilar to thoſe of other ſimples now in uſe among us in ſuch caſes. Beſides a ſtrong aromatic flavour, it poſſeſſes, we are told, a pungency to the taſte little inferior to the ſerpentaria, and much more conſiderable than the contrayerva. Our author finds it mentioned in a work attributed to Galen, that a medicine, compoſed of this and ſome other aromatics, was found uſeful in long-protracted fevers, which are the caſes, he obſerves, in which medicines of this claſs are employed in modern practice.

The paper is accompanied with an engraved figure of the plant, for which we muſt refer our readers to the work itſelf.

XVII. *An Account of a Child with a double Head. In a Letter from* Everard Home, *Eſq. F. R. S. to* John Hunter, *Eſq. F. R. S.* — Vide *Philoſophical Tranſactions of the Royal Society of London*, Vol. LXXX. *for the Year* 1790, Part II.

THE ſpecies of *luſus naturæ*, which is the ſubject of the curious and intereſting paper before us, is ſo extraordinary and unaccountable, that, although the facts are ſufficiently eſtabliſhed by the teſtimonies of the moſt reſpectable witneſſes, the author would ſtill, as he very candidly aſſures us, have been diffident in bringing them before the Royal Society, had he not been enabled at the ſame time to produce the double ſkull itſelf, in which the appearances illuſtrate ſo clearly the different parts of the hiſtory, that it muſt be rendered perfectly ſatisfactory to the minds of the moſt incredulous.

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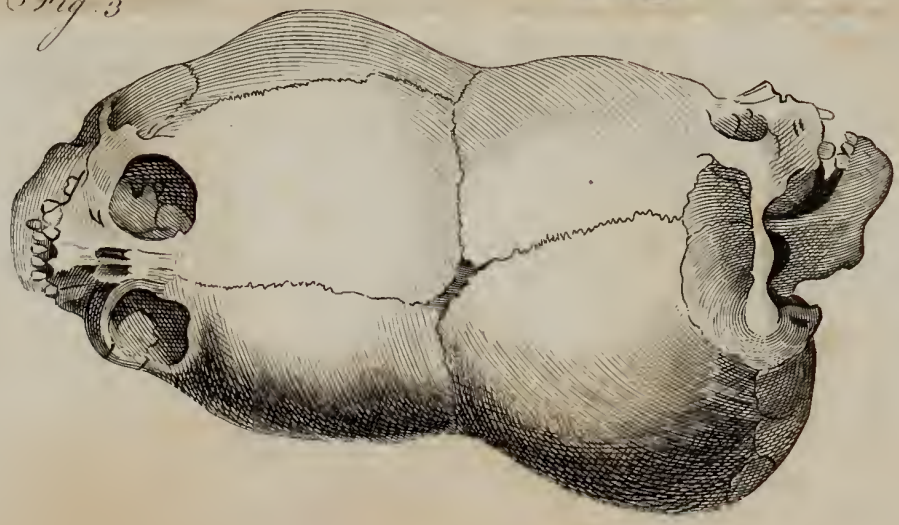
Fig. 1

Fig. 2.

Fig. 3



The following account of the child, when ſix months old, he was favoured with by Sir Joſeph Banks, who, it ſeems, from the hand-writing and other circumſtances, believes that it was written by the late Colonel Pierce. Mr. Home has, however, he tells us, been leſs ſolicitous to aſcertain the author, as the obſervations contained in this account agree ſo entirely with the remarks that were afterwards made, and with the appearances of the ſkull, that they require no name being annexed to them in confirmation of their having been made with accuracy and fidelity.

" The child was born in May, 1783, of " poor parents; the mother was thirty years " old, and named Nooki; the father was called " Hannai, a farmer at Mandalgent, near Bar- " dawan, in Bengal, and aged thirty-five.

" At the time of the child's birth, the wo- " man who acted as midwife, terrified at the " ſtrange appearance of the double head, en- " deavoured to deſtroy the infant by throwing " it upon the fire, where it lay a ſufficient time, " before it was removed, to have one of the " eyes and ears conſiderably burnt.

" The body of the child was naturally form- " ed, but the head appeared double, there be-

" ing, beſides the proper head of the child,
" another of the ſame ſize, and to appearance
" almoſt equally perfect, attached to its upper
" part. This upper head was inverted, ſo that
" they ſeemed to be two ſeparate heads united
" together by a firm adheſion between their
" crowns, but without any indentation at their
" union, there being a ſmooth continued ſur-
" face from the one to the other. The face of
" the upper head was not over that of the
" lower, but had an oblique poſition, the cen-
" ter of it being immediately above the right
" eye.

" When the child was ſix months old, both
" of the heads were covered with black hair
" in nearly the ſame quantity. At this period
" the ſkulls ſeemed to have been completely
" oſſified, except a ſmall ſpace between the oſſa
" frontis of the upper one, like a fontanelle.

" *Obſervations on the ſuperior or inverted Head.*

" No pulſation could be felt in the ſituation
" of the temporal arteries; but the ſuperficial
" veins were very evident.

" The neck was about two inches long, and
" the upper part of it terminated in a rounded
" ſoft tumor, like a ſmall peach.

" One

" One of the eyes had been conſiderably
" hurt by the fire, but the other appeared per-
" fect, having its full quantity of motion;
" but the eyelids were not thrown into action
" by any thing ſuddenly approaching the eye;
" nor was the iris at thoſe times in the leaſt af-
" fected, but, when ſuddenly expoſed to a
" ſtrong light, it contracted, although not ſo
" much as it uſually does. The eyes did not
" correſpond in their motions with thoſe of
" the lower head; but appeared often to be
" open when the child was aſleep, and ſhut
" when it was awake.

" The external ears were very imperfect,
" being only looſe folds of ſkin, and one of
" them mutilated by having been burnt. There
" did not appear to be any paſſage leading into
" the bone which contains the organ of hear-
" ing.

" The lower jaw was rather ſmaller than it
" naturally ſhould be, but was capable of mo-
" tion. The tongue was ſmall, flat, and ad-
" hered firmly to the lower jaw, except for
" about half an inch at the tip, which was
" looſe. The gums in both jaws had the na-
" tural appearance; but no teeth were to be
" ſeen either in this head or the other.

" The internal ſurfaces of the noſe and " mouth were lubricated by the natural ſecre- " tions, a conſiderable quantity of mucus and " ſaliva being occaſionally diſcharged from " them.

" The muſcles of the face were evidently " poſſeſſed of powers of action, and the whole " head had a good deal of ſenſibility, ſince " violence to the ſkin produced the diſtortion " expreſſive of crying, and thruſting the fin- " ger into the mouth made it ſhew ſtrong " marks of pain. When the mother's nipple " was applied to the mouth, the lips attempted " to ſuck.

" The natural head had nothing uncommon " in its appearance; the eyes were attentive to " objects, and its mouth ſucked the breaſt vi- " gorouſly. Its body was emaciated.

" The parents of the child were poor, and " carried it about the ſtreets of Calcutta as a " curioſity to be ſeen for money; and to pre- " vent its being expoſed to the populace, they " kept it conſtantly covered up, which was " conſidered as the cauſe of its being emaciated " and unhealthy."

The attention of the curious could not fail to be attracted by ſo uncommon a ſpecies of deformity;

deformity; and Mr. Stark, who was then resident in Bengal, paid, we are told, particular attention to the appearances of the different parts of the double head, and endeavoured to ascertain the mode in which the two skulls were united, as well as to discover the sympathies which existed between the two brains. This gentleman, on his return to England, finding that Mr. Home was in possession of the skull, and proposed drawing up an account of the child, very obligingly favoured him with the result of his observations, and at the same time permitted him to have a sketch taken from a very exact painting, made under his own inspection, from the child while alive, by Mr. Smith, a portrait painter then in India. From this figure *, and two others †, which accompany

* See Plate II. Fig. 1.

† See Plate II Fig. 2 and 3. In fig. 2 the double head is represented exactly half the natural size. One of the eyes of the upper face appears smaller or more contracted than the other; this is said to be in consequence of the injury it received when the child was thrown upon the fire. In this figure the superficial veins upon the forehead of the upper head are very distinctly seen.—Fig. 3 is an exact representation of the double skull, which is now in Mr. Hunter's collection, upon the same scale as fig. 2. Mr. Home observes of it, that it shows

pany Mr. Home's account, and which we have taken the liberty to copy for the gratification of our readers, a very accurate idea is given of the child's appearance.

At the time Mr. Stark ſaw the child it muſt have been, our author thinks, nearly two years old *, as it was ſome months before its death, which he has every reaſon to believe happened in the year 1785. At this period the appearances, we are informed, differed in many reſpects from thoſe taken notice of when the child was only ſix months old.

The burnt ear had ſo much recovered itſelf as only to have loſt about one fourth part of the looſe pendulous flap. The openings leading from the external ear appeared as diſtinct as in thoſe of the other head. The ſkin ſurrounding the injured eye, which was on the ſame ſide

ſhows the curious manner in which the two ſkulls are united together, and the number of teeth formed before the child's death; which circumſtance, he adds, aſcertains with tolerable accuracy its age.

* Mr. Home remarks, in a note, that the dentes molares, which uſually appear at twenty months or two years of age, were through the gums; and there was no reaſon, he adds, to expect them very early in this child.

with

with the mutilated ear, was in a ſlight degree affected, and the external canthus much contracted, but the eye itſelf was perfect.

The eyelids of the ſuperior head were never completely ſhut, remaining a little open, even when the child was aſleep, and the eyeballs moved at random. When the child was rouſed, the eyes of both heads moved at the ſame time; but thoſe of the ſuperior head did not appear to be directed to the ſame object, but wandered in different directions. The tears flowed from the eyes of the ſuperior head almoſt conſtantly, but never from the eyes of the other, except when crying.

The termination of the upper neck was very irregular, a good deal reſembling the cicatrix of an old ſore.

The ſuperior head ſeemed to ſympathize with the child in its natural actions. When the child cried, the features of this head were affected in a ſimilar manner, and the tears flowed plentifully. When it ſucked the mother, ſatisfaction was expreſſed by the mouth of the ſuperior head, and the ſaliva flowed more copiouſly than at any other time; for it always flowed a little from it. When the child ſmiled, the features of the ſuperior

perior head ſympathiſed in that action. When the ſkin of the ſuperior head was pinched, the child ſeemed to feel little or no pain, at leaſt not in the ſame proportion as was felt from a ſimilar violence being committed on its own head or body.

When the child was about two years old, and in perfect health, the mother, we are told, went out to fetch ſome water, and upon her return, found it dead, from the bite of a *Cobra de Capelo*. The body was buried near the banks of the Boopnorain river, but was afterwards dug up by Mr. Dent, the honourable Eaſt India Company's Agent for ſalt at Tumloch, on whoſe grounds the parents of the child then lived. By Mr. Dent it was given to Captain Buchanan, late Commander of the Ranger Packet, in the ſervice of the honourable the Eaſt India Company, who, being ſtruck with the uncommon appearance of the double ſcull, had expreſſed a wiſh that he might be permitted to bring it to Europe and preſent it to our author, to whom he well knew it would be highly acceptable. This requeſt, we are informed, was no ſooner communicated to Mr. Dent, than it was complied with; and Mr. Home obſerves that he ſhould do both theſe gentlemen

gentlemen injuſtice, were he not to attribute their readineſs upon the preſent occaſion to oblige him, in a great meaſure to their knowing that the double ſkull would be depoſited in Mr. Hunter's Collection, which muſt now be conſidered more as a national and public repoſitory than a private cabinet.

Mr. Home remarks that the two ſkulls which compoſe this monſtrous head appear to be nearly of the ſame ſize, and equally complete in their oſſification, except a ſmall ſpace at the upper edge of the oſſa frontis of the ſuperior ſkull, ſimilar to a fontanelle. The mode, he tells us, in which the two were united is curious, as no portion of bone is either added or diminiſhed for that purpoſe; but the frontal and parietal bones of each ſkull, inſtead of being bent inwards, ſo as to form the top of the head, are continued on; and, from the oblique poſition of the two heads, the bones of the one paſs a little way into the natural ſutures of the other, forming a zig-zag line, or circular ſuture, uniting them together.

The two ſkulls are ſaid to be almoſt equally perfect at their union; but the ſuperior ſkull, as it recedes from the other, is deſcribed as becoming more imperfect and de-

ficient in many of its parts. Mr. Home obſerves, for inſtance, that the meatus auditorius in the temporal bone is altogether wanting; and that the baſis of the ſkull is imperfect in ſeveral reſpects, particularly in ſuch parts as are to connect the ſkull with a body; the foramen magnum occipitale being only a ſmall irregular hole, very inſufficient to give paſſage to a medulla ſpinalis, and there being no condyles with articulating ſurfaces round its margin, as there were no vertebræ of the neck to be attached to it. He farther remarks that the foramen lacerum in the baſis of the cranium is only to be ſeen on one ſide, and even there is too ſmall for the jugular vein to have paſſed through; that the oſſa palati are deficient at their poſterior part; that the lower jaw is too ſmall for the upper; and that the condyle and coronoid proceſs of one ſide are wholly wanting.

In moſt other reſpects, the two ſkulls, we are told, are alike; the number of teeth in both being the ſame, viz. ſixteen.

From an examination of the internal ſtructure of the double ſkull, the two brains, our author obſerves, have certainly been incloſed in one bony caſe, there being no ſeptum of bone between

tween them. How far they were intirely diſtinct, and ſurrounded by their proper membranes cannot now be aſcertained; but from the ſympathies which were taken notice of by Mr. Stark, between the two heads, more particularly thoſe of the ſuperior with the lower, or more perfect, Mr. Home is inclined to believe, that there was a more intimate connexion between them than ſimply by means of nerves, and therefore that the ſubſtance of the brains was continued into one another.

Had the child, he obſerves, lived to a more advanced age, and given men of obſervation opportunities of attending to the effects of this double brain, its influence upon the intellectual principle muſt have afforded a curious and uſeful ſource of inquiry; but unfortunately, he adds, the child only lived long enough to complete the oſſification of the ſkull ſo as to retain its ſhape, by which means he has been enabled to aſcertain and regiſter the fact, without having enjoyed the ſatisfaction that would have reſulted from an examination of the brain itſelf, and a more mature inveſtigation of the effects it would have produced.

XVIII. *Case of a Gun-shot Wound in the Mouth; in which, on account of impeded Deglutition, a flexible Catheter was introduced through the Nose into the Oesophagus, and suffered to remain there during the Space of a Month. By M.* Manoury, *Surgeon of the Hotel Dieu at Paris.* Vide *Journal de Chirurgie, par M.* Desault, *Chirurgien en Chef de L'Hotel Dieu de Paris.* Tome I. 8vo. Paris, 1791.

THIS very curious case, though described by M. Manoury, appears to have been chiefly under the direction of M. Desault. It relates to a young man, who on the 18th of December, 1789, about midnight, discharged a loaded pistol into his mouth. M. Desault, who saw him within an hour after the accident, found him bleeding profusely at the mouth, with his face already considerably swelled; the inside of his mouth blackened by the powder; the right half of his tongue much torn and burnt; his lower jaw fractured on the right side; and a loss of substance in the back part of the bony palate, on the same side, large enough to admit his thumb; together with a laceration of the velum pendulum palati.

In

In order to aſcertain the extent of the wound M. Deſault, we are told, introduced a female catheter through the opening in the palate. From this examination there did not ſeem to be any communication with the cavity of the ſkull; and that the brain was not injured appeared ſtill more clearly from the rational ſtate of the patient; but M. Deſault was unable to diſcover either of the three balls, with which the patient by ſigns made him to underſtand the piſtol had been loaded. They were not to be found in the blood which had been diſcharged, and the patient was certain that he had not ſwallowed them; it was therefore thought likely that they might be concealed in the cells of the os ethmoides or in the ſphenoidal ſinuſes. With a view to ſuppreſs the hæmorrhage the flexible ſilver wire of a catheter was introduced through the right noſtril into the fauces, and its extremity, by the aſſiſtance of a finger, was brought out at the mouth; which was an operation of ſome difficulty on account of the ſwelling of the parts. To this extremity were tied the ends of two pieces, or ribands, as the author calls them, of waxed thread, between which was faſtened a doſſil of lint, large enough to fill that part of the pharynx which correſponds with

the posterior nostrils. By withdrawing the wire and threads through the nose, the doffil was carried into the fauces, and, by the assistance of a finger, applied against the posterior opening of the nostrils. The two portions of thread which came out through the nose being then separated, one of them was pulled towards the septum narium and the other to the opposite side. The nostril was now filled with small doffils of lint, over the last of which, larger than the rest, were tied the two ends of the waxed threads.

After having thus put a stop to the hæmorrhage, M. Desault attempted to reduce the two fragments of the lower jaw, one of which had been forced more than half an inch above the other; but the swelling of the soft parts rendered this attempt fruitless. He therefore, we are told, contented himself with applying to the cheeks, chin, and upper part of the neck, compresses moistened with vegeto-mineral water. But notwithstanding the frequent renewal of this appplication, and the use of a suitable gargle, the tumefaction went on increasing, so that the next day deglutition was become extremely painful and difficult, and on the second was altogether impossible.

In this alarming state of the case, M. Desault

was induced to remove the doſſils of lint from the noſtrils and fauces, as they were no longer neceſſary, and to introduce through the left noſtril a large catheter made of elaſtic gum, and properly curved, which he had before employed with ſucceſs, in a ſimilar manner. Having carried this as far as the middle and poſterior part of the pharynx, he with one hand drew out the wire of the catheter, while with the other he ſupported and fixed the catheter itſelf, which he endeavoured to introduce into the œſophagus, inſtead of which it paſſed, it ſeems, at firſt into the larynx. This was immediately known by a kind of guggling noiſe, and by the agitation of the flame of a candle brought cloſe to the mouth of the catheter. Such a deviation, the author obſerves, in an attempt to introduce a flexible catheter in this manner into the œſophagus is frequent, as the ſurgeon ſeldom ſucceeds at once in getting it into that channel. The inconvenience, however, ariſing from ſuch a deviation, is, he adds, not great; it being eaſy to diſcover it, not by the acute pain and convulſive cough, as hath been ſuppoſed (for in general neither of theſe, he remarks, takes place, and the patients appear to be but little incommoded by it) but by the trial with the

flame of a candle, in the way juſt now deſcribed.

M. Deſault having inſtantly withdrawn the catheter from the larynx, made a freſh attempt to get it into the œſophagus and ſucceeded. It was ſecured by means of two waxed threads fixed to its outer extremity, and twiſted round a pin in each ſide of the patient's night cap. About four ounces of broth were now injected through the catheter into the ſtomach, and an attendant was inſtructed in the manner of repeating this operation occaſionally. In this way, it ſeems, ſuitable medicines and nouriſhment were introduced into the ſtomach with great facility and without exciting the leaſt ſickneſs or uneaſineſs. The patient, we are told, was apprized of the neceſſity of repeating them, not by the uſual ſymptoms of hunger and thirſt, but by a peculiar ſenſation of weakneſs and gnawing in the epigaſtric region which ceaſed as ſoon as the injection was repeated.

On the third day there was a conſiderable degree of fever, and the inſide of the mouth was filled with ſmall portions of ſloughs, which, on the fourth day, when a ſuppuration began to take place, were more eaſily detached and brought away by means of a gargle of barley water

water and honey of roſes, of which the patient was directed to make frequent uſe. Hitherto the ſwelling of the parts had gone on increaſing, and was now, we are told, ſo conſiderable that the fauces appeared, as it were, entirely cloſed. It would therefore have been impoſſible, our author obſerves, to have got down the leaſt ſubſtance either liquid or ſolid in the uſual way of ſwallowing, and without the aſſiſtance of the catheter, which continued to remain in the œſophagus without any inconvenience to the patient.

On the ſeventh day the ſwelling appeared to be a little diminiſhed; the fever alſo was leſſened; and the ſuppuration on the inſide of the mouth was conſiderable, and furniſhed a copious diſcharge of a grayiſh and fœtid pus, which rendered a frequent uſe of the gargle neceſſary.

On the fifteenth, the tumefaction of the cheeks and mouth being almoſt entirely diſſipated, M. Deſault made a freſh but unſucceſsful attempt to reduce the fracture of the lower jaw. The catheter was ſtill kept in the œſophagus, and the patient ſeemed to mend daily.

From the fifteenth to the twentieth day, nothing remarkable, we are told, occurred. The mouth, at this period, was pretty free from ſloughs,

and ſeveral parts of it which had been in a ſtate of ulceration were already healed, as was alſo the velum pendulum palati; but there was ſtill a hole in the roof of the mouth. The catheter appearing to be no longer neceſſary, was now, it ſeems, withdrawn, and the patient attempted to ſwallow a little broth; but the loſs of one half of his tongue, the cicatrices on the inſide of his mouth and the conſtriction they occaſioned, together with the opening in the bony palate and his having been ſo long unaccuſtomed to ſwallowing, all concurred in rendering deglutition ſo difficult, that he entreated to have the uſe of the catheter continued ſome days longer. It was accordingly again introduced and ſuffered to remain till the thirtieth day, when it was finally withdrawn.

At firſt, and for ſeveral days after its removal, deglutition was performed, it ſeems, with difficulty; but by degrees became more eaſy. The patient's pronunciation likewiſe, we are told, was for ſome time difficult and indiſtinct.

The two fragments of the lower jaw were not yet united. One of them was ſtill, it ſeems, conſiderably higher than the other, though not ſo much ſo as at firſt; and their reduction was again attempted, but with as little ſucceſs as before.

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The patient remained at Paris a month after the removal of the catheter, and at the end of that time went into the country to his relations. The fractured portions of the lower jaw were even then not consolidated, but were reduced nearly to a level with each other, and it was thought likely that by removing one of the dentes molares, which by its projection seemed now to be the chief obstacle to the complete reduction of the fracture, every difficulty with regard to it would gradually give way.

Instead of a hole in the bony palate, there was now, we are told, only a small fissure to be perceived, which there was reason to expect would soon be completely closed. The patient had recovered, in some measure, the sense of taste, and although he still masticated with difficulty, was able to take solid food, and could even chew a crust of bread. He articulated, however, with difficulty, and spoke through his nose, except when he wore spectacles so as to compress his nostrils to a certain degree.

In some reflections on this case M. Manoury points out the great advantages the patient derived from the use of the flexible catheter, which by conveying suitable food and medicines into the stomach, seemed to have been the chief

means of preſerving his life. The utility of ſuch an inſtrument ſo applied, he obſerves, is not confined to caſes ſimilar to the preſent, but may be extended to a variety of other diſeaſes, ſuch as tetanus, hydrophobia, ſpaſmodic contraction of the pharynx, paralyſis of its muſcles or of thoſe of the tongue, and tumours ſituated along the œſophagus or in its coats, even within the thorax. Nor are the advantages of theſe catheters, he contends, limited to diſeaſes that prevent deglutition, as they are capable of being employed with ſucceſs in thoſe which affect the channels of reſpiration, whenever the obſtacle is ſeated above the bronchia, as, for example, in caſes of abſceſs or ulceration of the inner ſurface of the larynx, with diſeaſe of the cartilages; in certain fiſtulas of the trachea or larynx; in wounds of thoſe parts, &c. He even goes ſo far as to query, whether in caſes where both reſpiration and deglutition are impeded at the ſame time, as in ſome ſpecies of angina, in wounds of the neck where both the larynx and œſophagus are divided, it may not be adviſable to introduce a flexible catheter through each noſtril, and to paſs one into the œſophagus, and the other into the larynx, fixing them to the patient's cap, as in the preceding

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ing caſe, and taking care to diſtinguiſh them by ſome obvious mark, ſo that the injection may not by miſtake be forced into the lungs inſtead of the ſtomach. M. Deſault, he obſerves, has as yet made no trial of this method in affections of the larynx, but propoſes to have recourſe to it in the firſt favourable caſe that ſhall preſent itſelf; and he foreſees, we are told, nothing that can prevent it from ſucceeding.

The facility with which theſe catheters may be introduced into the larynx, the little inconvenience ſome perſons have experienced who have had them in that paſſage for ſeveral minutes, and the effects of canulas which have been worn by patients in the trachea, ſeveral days after the operation of bronchotomy, all tend, he thinks, to obviate the objections which may be made to ſuch a mode of treatment on account of the difficulty of executing it, or the ſuppoſed impoſſibility of a patient's ſupporting ſuch an inſtrument in a part thought to be ſo irritable as the larynx.

XIX.

XIX. *Account of an extraordinary Change, not hitherto deſcribed, which, under certain Circumſtances, takes place in the human Body after Death.*—Vide *Rapport ſur les Exhumations du Cimetiere et de l'Egliſe des Saints Innocens; lú dans la Seance de la Société Royale de Medecine tenue au Louvre le* 3 *Mars*, 1789. *Par M.* Thouret. 4to. Paris, 1790.

IN this report, relative to the removal of the bodies from the church and church-yard of the Holy Innocents, M. Thouret, who is a very reſpectable phyſician at Paris, and already well known to the Public by his writings, gives an account of a very extraordinary change to which the human body, under certain circumſtances, is ſubject after death.

The ſituation of the burial place in queſtion, in the center of the city of Paris, has for a great length of time pointed it out as a nuiſance to the Public. Its ſuppoſed unhealthineſs occaſioned it to be a ſubject of inquiry ſo long ago as the year 1557, when two phyſicians, Fernelius and Houllier, were directed by Government to examine it; and in 1737 a Committee of the Academy of Sciences was appointed

pointed for the ſame purpoſe. On both theſe occaſions the removal of it was earneſtly recommended; but it does not appear that any ſteps were taken to remedy the inconvenience complained of till the year 1780, when an order was iſſued to prevent any more burials in this ſpot. This regulation, however, M. Thouret obſerves, which might have been ſufficient in the generality of places of this kind, where the bodies, being but thinly interſperſed in the earth, are ſpeedily deſtroyed, was altogether inadequate to the evil in the preſent inſtance, the ſoil being here ſo ſaturated with animal matter as to be no longer capable of any action on the more recent bodies accumulated within it.

M. Thouret obſerves, that ſince the year 1186 this place has ſerved as a common burial place for the greater part of the city of Paris, and that for a great number of years paſt from two thouſand five hundred to three thouſand bodies have been interred in it annually. He has been aſſured, it ſeems, that in a ſomewhat leſs ſpace of time than thirty years upwards of eighty thouſand bodies were interred in it by the laſt ſexton. This immenſe collection of dead bodies occupied, we are told, a

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ſurface of more than ten thouſand ſquare feet. They were accumulated, for the moſt part, in common graves, or pits, from twenty-five to thirty feet deep, each of which was large enough to contain from twelve to fifteen hundred coffins: and as a proof how few bodies were buried in ſeparate graves, we are told that the number of ſuch interments ſeldom exceeded two hundred annually.

At length, Government having determined to remove this nuiſance, the Royal Medical Society were called upon to point out the beſt mode of doing it; and our author, who was one of the Committee appointed by the Society for that purpoſe, and who ſuperintended the whole of the undertaking, now communicates the reſult of his obſervations on this ſubject to the Public. The operations laſted upwards of two years, and during that period, it ſeems, a layer of earth from eight to ten feet deep was removed from the ſurface of the burial ground to the extent of twelve thouſand ſquare feet, and, beſides a great number of ſeparate graves, between forty and fifty of the common receptacles were opened to the depth of eight or ten feet, and ſome of them to their very bottom, and

and about twenty thouſand bodies, buried at different periods, were removed with their coffins.

Amidſt a great variety of appearances which ſo many bodies exhibited, from their having been interred a greater or leſs ſpace of time, in ſeparate graves or in the common receptacles, there was one extraordinary circumſtance which ſoon ſtruck our author's attention. This was the ſtate of the coffins and bodies in the common pits. The coffins in theſe were, in general, firm and in good preſervation; and the earth that ſurrounded them was of a deep black colour; but, excepting this blackneſs which had tinged the coffins externally, they retained their freſhneſs, and within ſide the natural colour of the wood was eaſily diſtinguiſhable. The ſhrouds were obſerved to be in the ſame ſtate of preſervation, and the bodies themſelves appeared to be undiminiſhed in bulk. Upon removing the ſhroud the fleſhy parts of the bodies ſeemed to be preſerved; the only change that was perceived conſiſted in their being converted, as it were, into a ſubſtance, the whiteneſs of which was heightened by the blackneſs of the ſurrounding ſoil.

The author tells us that at firſt ſight of this curious phenomenon he was inclined to con-

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ſider it as the effect of lime ſpread over theſe bodies; but upon examining them more attentively he was ſoon convinced that he was wrong in this ſuppoſition, and he found that all the ſoft parts were converted into a white maſs, more or leſs firm, and already known among the gravediggers by the name of fat, *(gras.)* This maſs, which exhibited no appearance of a fibrous texture, felt unctuous or ſoapy when rubbed between the fingers, and in a dry air grew harder, and even acquired a ſhining poliſh and a ſort of metallic luſtre, but became ſofter when expoſed to a moiſt air.

In general theſe maſſes, the author obſerves, preſerve the entire ſhape of the limbs. Among the bodies which he found the moſt completely transformed into this ſubſtance, and which form a part of the collection he has made to illuſtrate the hiſtory of this phenomenon, ſeveral, he tells us, retain their natural ſhape, together with the features of the face, the eyes, eyebrows, and eyelids. The tranſmutation, he obſerves, is not confined to the ſurface of the body, but may be traced through every part of the muſcles, ligaments, and tendons, and likewiſe through the different cavities, where all or the greater part of the viſcera are found converted

verted into the ſame ſubſtance, which is alſo to be ſeen in the cavities of the bones, even in the cells of the diploe. It is found to affect the texture of the cartilages, but the bones themſelves, it ſeems, remain unaltered, as do likewiſe the hair and nails. There are likewiſe, we are told, certain colouring principles, ſuch as the bile, the fluid of the bronchial glands, the pigmentum of the choroid, the red particles of the blood, and the fibrous part of the muſcles, which remain for a long time diſtinguiſhable in the maſs that ſurrounds them.

The parts that have appeared to our author to be the moſt ſuſceptible of this change have been the adipoſe and membranous. Some parts, he obſerves, evidently acquire it much ſooner than others, and he has found the blood veſſels of different viſcera, particularly thoſe of the liver, transformed into this maſs, while the ſurrounding ſubſtance of the viſcus itſelf had as yet undergone no ſuch change.

He obſerves that, in general, the parts preſerve their natural configuration in proportion to the quantity of adipoſe and lymphatic juices they contain, and in proportion to the denſity of their texture. Thus the brain, the heart, the liver, and ſome other viſcera, it ſeems, change

change completely into this ſubſtance, and retain their original figure, while of the inteſtines and the ſpongy and veſicular texture of the lungs only ſlight veſtiges remain after this change, and in theſe the fatty ſubſtance into which they are converted is of a much thinner conſiſtence than in the other parts.

From a chemical analyſis of this ſubſtance, for which our author acknowledges himſelf indebted to M. Fourcroy, it appears to conſiſt of an oily principle combined with volatile alkali ſo as to form a ſoap. The oily baſis of this ammoniacal ſoap, ſeparated by acids, is deſcribed as a concrete ſubſtance, of a grayiſh yellow colour, and ſomewhat more fuſible than wax; combined with fixed or volatile alkali it forms, we are told, a firm ſoap.

M. Thouret remarks, that it is not ductile under the fingers like wax, but that it crumbles into ſmall, ſoft, and unctuous fragments like ſpermaceti, the ſubſtance with which he conſiders it as having the greateſt analogy. Thus he obſerves that it chryſtalliſes like ſpermaceti, and diſſolves even in a greater proportion than that does in heated alcohol; part of it ſeparating again as the ſolution cools, in the form of ſmall ſhining laminæ.

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From theſe data our author is led to attempt a theory of the formation of this ſubſtance. He aſcribes it to a peculiar modification of the putrid change that bodies undergo in the earth, and thinks that the origin of all the phenomena is to be ſought for in the decompoſition of water. It has been ſuppoſed, he obſerves, that from a combination of phlogiſticated with inflammable air there reſults, during putrefaction, volatile alkali; and the fixation of a larger proportion of inflammable air, and perhaps alſo of a certain quantity of dephlogiſticated air, may, he thinks, give riſe to a fat or oily ſubſtance, which, by uniting with the volatile alkali, forms a ſoap.

M. Thouret obſerves, that a concretion analogous to this ſubſtance is not foreign to the living animal œconomy; that it exiſts, as is well known, in large maſſes in the cavities of the brain of the whale, and is diſtributed by numerous veſſels through all the parts of that animal; and that it is alſo to be found in the bile, where till of late it has been taken for a reſin. It has ſometimes, he adds, been found extravaſated in the liver when dried in the air, as was proved by the late M. Poulletier de la Salle, of Paris, who, having expoſed a human

liver to the air for a conſiderable number of years, found it changed, at length, into a whitiſh maſs, in its appearance not unlike agaric, and which, on expoſure to a gentle heat, yielded a ſubſtance ſimilar to ſpermaceti. M. Thouret aſſures us his experiments have taught him that a ſubſtance of the ſame kind may be extracted in abundance from the brain of man and other animals. May it not, therefore, he aſks, be latent in the living body, and intended to anſwer ſome purpoſe in the animal œconomy with which we are as yet unacquainted?

This ſingular tranſmutation, he obſerves, though it is found to affect bodies of both ſexes, and of all ages, is ſubject, however, to ſome differences which have not eſcaped the notice of the gravediggers, who have remarked that bodies which are the fatteſt and moſt compact paſs the ſooneſt into this ſtate; that very dry and lean ones acquire more of the appearance of dry mummies; and that lax and humid ones melt into water.

The tranſmutation, whatever may be its nature, takes place, we are told, indifferently in different kinds of earth. It likewiſe appears to be completed in a ſhort ſpace of time. The

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laſt great pits of the burial place had been cloſed, it ſeems, only five years, and from the ſurface to the bottom all the bodies they contained, a very ſmall number excepted, were found by our author transformed into the ſubſtance in queſtion.

In general, however, the manner in which this tranſmutation, when once begun, goes on and is completed, appears to be not altogether uniform. In the pits where it ſeemed to be the moſt completely effected, the greater number of bodies, we are told, were entirely transformed; but, on the other hand, in ſome the change appeared to be only juſt beginning to take place, while in others the decompoſition was complete. In the ſmall number that afforded no marks of it the bones only remained, and theſe exhibited the common appearance. Were theſe, the author aſks, the remains of bodies that had paſſed through this ſtate, and had afterwards been totally deſtroyed? There was nothing, he obſerves, in the ſituation of theſe laſt that could explain the difference. They were found at all depths, and cloſe to others in which the change was complete. In general, however, it ſeems, it was in the bodies at the greateſt depth that the change appeared to take place

the ſooneſt, and theſe alſo ſeemed to be the laſt in which this fatty ſubſtance was deſtroyed. Our author found this fact confirmed by what he ſaw in two other burial grounds at Paris.

It appears from M. Thouret's obſervations, that the ſkin is the part in which this change firſt begins to take place, and that after this follow the fat, the muſcles, and the viſcera. In the early ſtage of the tranſmutation the texture of the ſkin, we are told, is ſtill diſtinguiſhable, as is alſo the colour of the fat and of the muſcles, and it is not till the fibrous texture of the latter has entirely diſappeared that the change can be ſaid to be complete. When this is accompliſhed, a decompoſition begins to take place. This is firſt obſervable in the cavities of the body, and as it advances the bones become diſunited, the fatty ſubſtance is gradually diſſolved, and at length there remain only ſlight appearances of it adhering to the ſurface of the bones; but in this ſtate it has the conſiſtence and colour of clay, or becomes dry and friable and of a darker colour. M. Thouret ſuppoſes this to be the remains of the colouring principle, or of the earthy principle ſtill combined with a little of the fatty ſubſtance.

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The brain, according to our author, is the part that is the laſt deſtroyed.

As it is to the extrication of aeriform fluids from the dead body during putrefaction, and to the re-action of thoſe fluids on the body itſelf, that our author thinks we are to aſcribe the formation of this ſubſtance, ſo he obſerves that it is not till the ſurrounding earth is ſaturated with theſe fluids that the change begins to take place. This ſaturation of the earth he thinks is proved by its black colour. Expoſed to the air, it ſoon, he obſerves, loſes this appearance, and becomes capable of diſſolving the fatty ſubſtance in queſtion. He has found this ſubſtance only in the common pits where the ſurrounding earth has acquired this black colour; he has never been able to diſcover any traces of it in ſingle graves; he therefore concludes that an accumulation of animal bodies in large maſſes is requiſite for its formation, and alſo that theſe maſſes muſt be ſufficiently covered with earth o prevent the evaporation of the aeriform fluids that are extricated, becauſe in proportion as theſe eſcape, the ſaturation of the ſurrounding earth becomes leſs complete.

But beſides the evaporation of theſe fluids which takes place ſooner or later, another cauſe is mentioned by our author as contributing

very powerfully to the deſtruction of the bodies thus transformed, and that is the moiſture of the ſoil, which by reaſon of the ſoapy nature of the ſubſtance in queſtion is found to diſſolve it very completely. The ſtate of the earth, in this reſpect, is, therefore, one of the principal circumſtances on which the duration of this ſubſtance depends. Our author accordingly obſerved that in the pits the leaſt expoſed to the ſun, and which, from their ſituation in other reſpects, were moſt liable to moiſture, the bodies were the moſt ſpeedily decompoſed. He has even ſeen coffins in an inclined poſition, in one part of which, expoſed to the action of moiſture, the ſubſtance in queſtion was completely diſſolved, while in the dry part it had undergone no change.

Of this curious phenomenon, which ſeems hitherto to have eſcaped obſervation, M. Thouret remarks that it adds new facts to the hiſtory of the decompoſition of animal bodies in the earth, and may be conſidered as a particular ſpecies of mummyfication, which, compared with that which produces the dry and fibrous mummy, ſhews us in this way a new proceſs of nature. Both theſe ſpecies of mummy, he obſerves, depend on the action of aeriform fluids.

Thus the deſtruction of the body takes place if theſe evaporate; the ſpecies of mummy, which is more immediately the ſubject of this paper, is produced if theſe fluids when diſengaged are reflected on the ſoft parts of the body or retained in their texture; and, on the other hand, the dry and fibrous mummy is formed whenever theſe ſame fluids are not at all or imperfectly diſengaged.

On ſimilar principles, he thinks, may be explained the different circumſtances obſerved in the decompoſition of bodies in burial grounds, whether in ſeparate or in common graves; thoſe circumſtances more eſpecially which may be aſcribed to the nature of the ſoil. In general, he obſerves, they will depend on the facility with which it abſorbs or tranſmits the different ſpecies of air extricated from bodies by putrefaction, and hence, dry ſand is, he thinks, the moſt favorable to the decompoſition of bodies. This decompoſition will alſo, he adds, be accelerated by calcareous earths, which are known to be very porous and permeable, and for this reaſon have been called putrid or ſeptic earths. On the other hand, compact argillaceous earths, he obſerves, are found to retard this decompoſition, as was mentioned by Meſſieurs Lemery,

Geoffroy, and Hunauld, in their report to the Academy of Sciences in 1738.

These facts, the author farther remarks, serve to shew how little foundation there is for the opinion commonly entertained relative to the conversion of the dead body into earth, no such appearance having been observed in any of the coffins that were intire; neither, he adds, is what is usually imagined true that the body is, in general, destroyed by worms, as these are found only near the surface of the earth, or in bodies that have been exposed to the air. His observations have convinced him that human bodies consigned to the earth insensibly exhale and evaporate in volatile principles; and for this reason it is, he thinks, that the soil of burial places does not perceptibly accumulate.

M. Thouret preserves in his collection specimens procured in these researches, and which serve to confirm and illustrate all the facts he has related in the report before us; and he proposes in subsequent papers to describe the different parts of the subject more fully, and to give engravings of the appearance of different parts of the bodies he has examined.

CATA-

CATALOGUE OF BOOKS.

1. A NEW Tranſlation of the Pharmacopœia of the Royal College of Phyſicians of London, of the Year 1787; with Notes critical and explanatory; Doſes of the ſeveral Preparations; likewiſe a Table of the quantities of Opium and Quickſilver in the compound Medicines which contain them; and a Liſt of the new Names, together with Latin and Engliſh Indexes. By an Apothecary. 8vo. *Johnſon*, London, 1789.

2. Obſervations on the Duties of a Phyſician, and the Methods of improving Medicine; accomodated to the preſent State of Society and Manners in the United States: delivered in the Univerſity of Pennſylvania on the 7th of February, 1789, at the Concluſion of a Courſe of Lectures upon Chemiſtry and the Practice of Phyſic. By *Benjamin Ruſh*, M. D. 8vo. Philadelphia, 1789.

3. Practical Hints on Opium conſidered as a Poiſon. By *R. Hamilton*, M. D. 8vo. Ipſwich, 1790.

4. Thoughts Phyſiological, Pathological, and Practical, with ſome Caſes, and Anatomico-practical

tical Obſervations. By *Allen Swainſton*, M. D. at York. 8vo. York, 1790.

5. A Letter to Sir John Sinclair, Bart. concerning the Virtues of the Muriatic Acid, or Spirit of Sea Salt, in the Cure of Putrid Diſeaſes. By Sir *William Fordyce*, M. D. F. R. S. 8vo. *Cadell*, London, 1790.

6. An Eſſay on Fevers; wherein their theoretic Genera, Species and various Denominations, are, from Obſervation and Experience for thirty Years, in Europe, Africa, and America, and the intermediate Seas, reduced under their Characteriſtic Genus, febrile Infection; and the Cure eſtabliſhed on Philoſophical Induction. By *Robert Robertſon*, M. D. a Surgeon of his Majeſty's Navy. 8vo. *Robinſons*, London, 1790.

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58. Diſſertatio Inauguralis Medico-Therapeutica de Cortice Anguſturæ; Auctore *Frid. Alb. Ant. Meyer*, Hamburgenſe. 8vo, Gottingæ, 1790.

In this diſſertation the author gives a botanical deſcription of the *Magnolia Glauca* LINN., on a ſuppoſition that the Cortex Anguſturæ, as it is called, is the bark of that tree; but, on comparing the Anguſtura bark with the bark of the Magnolia Glauca, we do not find the leaſt ground for this conjecture *, which, it ſeems, originated

* Mr. Brande, in an ingenious and valuable work on this ſubject lately publiſhed, (ſee article 23 of the preſent Catalogue) obſerves alſo, that having procured and dried the barks of two ſpecies of *Magnolia*, the *Glauca* and *Grandiflora*, he found them to differ completely from the Anguſtura.

originated with Mr. Heyer, in a paper on this ſubject inſerted in the Brunſwick Magazine, Part V. for the year 1790.

59. Diſſertatio Inauguralis medica de Cortice Anguſturæ ejuſque uſu medico; Auctore *Franciſco Erneſto Filter*, Nordhuſano. 4to. Jenæ, 1791.

In this diſſertation alſo we find the author mentioning the conjecture lately thrown out in Germany relative to this bark being the produce of the Magnolia Glauca. He relates ſome inſtances of its efficacy in intermittents; and recommends it likewiſe as a tonic and antiſeptic remedy.

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Some perſons in this country have aſſerted that the Cortex Anguſturæ is the bark of the *Brucea Antidyſenterica*, or Wooginos of the Abyſſinians; but the dried bark of this ſhrub is found to be very different from the Cortex Anguſturæ.—EDITOR.

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